

CITY OF ROCHESTER  
201 4<sup>TH</sup> STREET SE, ROOM 108  
ROCHESTER, MN 55904-3742

\*\*\*\*\*PROPOSAL\*\*\*\*\*

FOR HIGHWAY CONSTRUCTION  
AND MAINTENANCE PROJECTS WITH  
BIDS RECEIVED UNTIL 11:00 O'CLOCK A.M. ON **September 14, 2011**

PROPOSAL OF

(Name of Firm)

(Phone No.)

(Address)

(Fax No.)

(City)

(State)

(Zip)

TO FURNISH AND DELIVER ALL MATERIALS AND TO PERFORM ALL WORK IN ACCORDANCE WITH THE CONTRACT, THE PLANS AND THE APPROVED DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION", 2005 EDITION, EXCEPT AS STATED OTHERWISE IN THE SPECIAL PROVISIONS WHICH ARE PART OF THIS PROPOSAL, FOR

CITY PROJECT NO. M7-18 J NO. (J7257)

STATE PROJECT NO. 159-166-001 PINEWOOD RD

159-167-001 30<sup>TH</sup> AVE SE

MINNESOTA PROJECT NO. STP 5511 ( 257 )

LOCATION: Pinewood Road & 30<sup>th</sup> Ave SE, ROCHESTER, MN

TYPE OF WORK BITUMINOUS ROADWAY RECONSTRUCTION, INCLUDING, WATERMAIN, STORM SEWER AND SIDEWALK

LENGTH 1.716 MILES

STARTING DATE: April 1, 2012

COMPLETION DATE: September 30, 2012

NOTICE TO BIDDERS: In submitting a bid, you must return this complete proposal. You must initial changes made in the Schedule of Prices in the Proposal and acknowledge addenda on the back cover sheet.

I certify that this Proposal was prepared by me or under my direct supervision, and that I am a licensed professional engineer under the laws of the State of Minnesota.

Russell J. Kelm  
Russell J. Kelm,

08/23/11  
License Number 24667

(Date)

\*\*\*\*\*

BID RIGGING IS A SERIOUS CRIME. IF YOU HAVE ANY INFORMATION CONCERNING COLLUSIVE BIDDING, EVEN A REQUEST TO SUBMIT A COMPLIMENTARY BID, PLEASE CALL THE MINNESOTA ATTORNEY GENERAL'S OFFICE AT TELE. NO. 651-296-1796



## TABLE OF CONTENTS

<b>NOTICE OF BIDS</b>	<b>1</b>
NOTICE TO ALL BIDDERS – TO REPORT BID RIGGING .....	3
LIMITATION ON USE OF CONTRACT FUNDS FOR LOBBYING .....	4
NOTICE (BY SIGNING AND SUBMITTING THIS PROPOSAL) .....	10
NOTICE TO BIDDERS (TRAFFIC CONTROL PREVAIL WAGE) .....	12
NOTICE TO BIDDERS – SUSPENSIONS / DEBARMENTS .....	14
NOTICE TO BIDDERS – DISADVANTAGED BUSINESS ENTERPRISE (DBE) REQUIREMENT .....	16
<b>SPECIAL PROVISIONS DIVISION A - LABOR</b>	<b>1</b>
FEDERAL WAGE RATES .....	13
NOTICE TO BIDDERS (PROMPT PAYMENT TO SUBCONTRACTORS) .....	19
PREVAILING WAGES FOR STATE FUNDED CONSTRUCTION .....	20
NOTICE OF CERTIFICATION OF TRUCK RENTAL RATES .....	32
<b>DIVISION S</b>	<b>1</b>
S-1 DESCRIPTION .....	1
S-2 REFERENCE DOCUMENTATION .....	1
S-3 DESIGNATION OF PARTIES .....	1
S-4 DEFINITION OF TERMS .....	2
S-5 CONTRACT WORDING .....	3
S-6 BIDDING REQUIREMENTS AND CONDITIONS .....	3
S-7 AWARD AND EXECUTION OF CONTRACT .....	5
S-8 CONTROL OF WORK .....	5
S-9 LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC .....	6
S-10 MEASUREMENT & PAYMENT .....	9
S-11 OWNER AND EASEMENTS .....	10
S-12 CONFLICTS IN DIMENSIONING .....	10
S-13 PRE-CONSTRUCTION CONFERENCE .....	10
S-14 CONTACT INFORMATION .....	10
S-15 SPECIAL PROVISIONS ENCOURAGING INDIAN EMPLOYMENT .....	11
S-16 RESIDENT PREFERENCE IN PUBLIC CONTRACTS .....	11
S-17 (1213) DISQUALIFICATION OF BIDDERS .....	11
S-18 (1302) AWARD OF CONTRACT RESIDENT PREFERENCE IN PUBLIC CONTRACTS .....	12
S-19 (1305) REQUIREMENT OF CONTRACT BOND .....	12
S-20 (1404) MAINTENANCE OF TRAFFIC, (1707) PUBLIC SAFETY, AND (2563) TRAFFIC CONTROL .....	12
S-21 (1506) SUPERVISION BY CONTRACTOR .....	15
S-22 (1507) UTILITY PROPERTY AND SERVICE .....	15
S-23 (1601) SOURCE OF SUPPLY AND QUALITY .....	17
S-24 (1701) LAWS TO BE OBSERVED (DATA PRACTICES) .....	17
S-25 (1710) TRAFFIC CONTROL DEVICES .....	18
S-26 (1717) NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT .....	18
S-27 (1802) TRAINING FOR CONSTRUCTION TRUCK OPERATORS .....	19
S-28 (1803) PROSECUTION OF WORK .....	20
S-29 (1806) DETERMINATION OF CONTRACT TIME .....	22
S-30 INCIDENTAL WORK .....	22
S-31 (1904) EXTRA AND FORCE ACCOUNT WORK .....	22
S-32 (1910) FUEL ESCALATION CLAUSE .....	23
S-33 (2021) MOBILIZATION .....	23
S-34 (2041) ON-THE-JOB-TRAINING PROGRAM .....	24
S-35 (2101) CLEARING AND GRUBBING .....	27
S-36 (2104) REMOVING PAVEMENT AND MISCELLANEOUS STRUCTURES .....	28
S-37 (2105) EXCAVATION AND EMBANKMENT .....	30
S-38 (2105) COMMON CHANNEL EXCAVATION .....	32
S-39 (2105) (3877) TOPSOIL BORROW .....	32
S-40 (2123) EQUIPMENT RENTAL .....	33
S-41 (2211) AGGREGATE BASE .....	33
S-42 (2357) BITUMINOUS MATERIAL FOR TACK .....	34
S-43 (2360) PLANT MIXED ASPHALT PAVEMENT .....	35
S-44 (2461) STRUCTURAL CONCRETE .....	37
S-45 (2501-6) STORM SEWER .....	54



S-46	(2503-6) SANITARY PIPE SEWER .....	55
S-47	(2504) WATERMAIN .....	56
S-48	(2511) RIPRAP AND FABRIC .....	57
S-49	(2521) CONCRETE WALK .....	58
S-50	(2521) BITUMINOUS BIKE PATH .....	60
S-51	(2531) CONCRETE CURBING .....	61
S-52	(2531) CONCRETE DRIVEWAY PAVEMENT .....	63
S-53	(2531) PEDESTRIAN CURB RAMP – TRUNCATED DOME SYSTEMS.....	63
S-54	(2540) RELOCATE MAILBOXES.....	64
S-55	(2563) RAISED PAVEMENT MARKERS TEMPORARY (TRPMs) .....	64
S-56	(2564) TRAFFIC SIGNS AND DEVICES .....	64
S-57	(2573) TEMPORARY EROSION CONTROL AND TURF ESTABLISHMENT .....	65
S-58	(2573) EROSION CONTROL SUPERVISOR .....	66
S-59	(2575) PERMANENT EROSION CONTROL AND TURF ESTABLISHMENT .....	67
S-60	(2582) PERMANENT PAVEMENT MARKINGS .....	68
S-61	(3137) COARSE AGGREGATE FOR PORTLAND CEMENT CONCRETE.....	69
S-62	(3138) AGGREGATES FOR SURFACE AND BASE COURSES .....	74
S-63	(3139) (D6) GRADED AGGREGATE FOR BITUMINOUS MIXTURES .....	76
S-64	(3590) EPOXY RESIN PAVEMENT MARKINGS (FREE OF TOXIC HEAVY METALS).....	82
S-65	(3236) REINFORCED CONCRETE PIPE .....	84
S-66	(3876) SEED.....	84
S-67	(3889) TEMPORARY DITCH CHECKS.....	94
S-68	(3891) STORM DRAIN INLET PROTECTION .....	94
S-69	FINAL ESTIMATE AND FINAL PAYMENT.....	95
<b>STORM WATER POLLUTION PREVENTION PLAN (SWPP) .....</b>		<b>1</b>
CONTACT INFORMATION.....		3
FIGURE 1 – PROJECT LOCATION QUADRANGLE MAP.....		5
FIGURE 2 –OLMSTED COUNTY GEOLOGIC ATLAS SOIL TYPES MAP .....		6
FIGURE 3 – DEPARTMENT OF NATURAL RESOURCES (DNR) WATERSHEDS MAP.....		7
CONSTRUCTION PROJECT INFORMATION (III.A) .....		8
GENERAL SITE INFORMATION (III.A).....		9
TRAINING (III.A) .....		10
SELECTION OF A PERMANENT STORMWATER MANAGEMENT SYSTEM (III.C).....		11
RECORDS RETENTION (III.D).....		11
EROSION PREVENTION PRACTICES (IV.B) .....		12
SEDIMENT CONTROL PRACTICES (IV.C) .....		13
DEWATERING AND BASIN DRAINING (IV.D) .....		13
INSPECTIONS AND MAINTENANCE (IV.E).....		14
POLLUTION PREVENTION MANAGEMENT MEASURES (IV.F) .....		15
FINAL STABILIZATION (IV.G).....		16
NPDES STORM WATER PERMIT: .....		17
APPLICATION FOR PERMIT TRANSFER/MODIFICATION:.....		19
<b>ATTACHMENTS TO THE SPECIAL PROVISIONS .....</b>		<b>1</b>
STIPULATION FOR FOREIGN IRON OR STEEL MATERIALS.....		1
TEMPORARY RAISED PAVEMENT MARKERS (TRPMs) .....		2
SPECIFICATIONS FOR EPOXY RESIN PAVEMENT MARKINGS (FREE OF TOXIC HEAVY METALS) .....		5
1910) FUEL ESCALATION CLAUSE .....		14
SCHEDULE OF MATERIALS CONTROL.....		17
(2360) PLANT MIXED ASPHALT PAVEMENT .....		63
DISADVANTAGED BUSINESS ENTERPRISE (DBE) SPECIAL PROVISIONS .....		103
CERTIFICATE OF GOOD FAITH EFFORTS CONSOLIDATED FORM (GFE FORM) INSTRUCTIONS.....		131
EEO SPECIAL PROVISIONS .....		131
APPENDIX A (SHORT VERSION) .....		165
MN REVENUE WITHHOLDING FORM IC 134 .....		167
<b>ADDENDUM NO. 1 .....</b>		<b>1</b>
<b>FORM OF PROPOSAL .....</b>		<b>1</b>
ABBREVIATIONS OF SCHEDULE OF PRICES.....		3
ATTACHMENT CM 32–34 .....		4
NON-COLLUSION AFFIDAVIT .....		5



MN/DOT 21816.....	6
SCHEDULE OF PRICES.....	9
SURETY DEPOSITS.....	15
FORM 21126D (FF REV. 4-00) .....	18



**CITY OF ROCHESTER  
NOTICE OF BIDS**

Notice is hereby given that bids will be received at the office of the City Clerk until **11:00 A.M. on September 14 2011** for the construction of the following described local improvement, pursuant to Minnesota Statutes, Chapter 429, as amended, in accordance with the plans and specifications for the same which are on file in the Office of the City Clerk of said City::

**State No ..... SP 159-166-001 & 159-167-001**

**Federal No ... STPX 5511 ( 257 )**

**City No ..... M7-18 (J7257)**

**Reconstruct Pinewood Rd from 11th Ave SE (CSAH 1) to 30th Avenue SE & 30th Ave SE from Pinewood Rd to Marion Rd (CSAH 36)**

Immediately following expiration of the time for receiving bids, the City Clerk and two designated City officials will publicly open said bids in the City Hall and tabulate them in advance of the Council meeting. The Common Council will consider the bids in the Council/Board Chambers at the Government Center at **7:00 P.M. on September 19, 2011.**

Said Construction generally consists of **Bituminous Street Construction**. The work includes the following approximate quantities of work:

**Common Excavation ..... 13,490 Cu Yds**

**Aggregate Base ..... 12,056 Cu Yds**

**Bituminous ..... 11,500 Tons**

**Curb and Gutter ..... 13,700 Lin Ft**

**5-7" Concrete Sidewalk ..... 40,121 Sq Ft**

**12-60" RCP ..... 6,152 Lin Ft**

**Relocate Hydrant ..... 5 Each**

**A pre-bid meeting will be held at Rochester City Hall, Conference Rm104 on September 6, 2011 at 10 A.M., Rochester City hall address is 201 4<sup>th</sup> Street S.E. Attendance at the pre-bid meeting is not mandatory.**

Plan, Specifications and Contract Documents may be examined at the Department of Public Works, 201 4th St. SE, Room 108, Rochester, MN 55904, (507) 328-2400 or the City's website at <https://egram.rochestermn.gov/>.

Each bid must be sealed and accompanied by a cash deposit, bid bond, cashier's check or a certified check payable to the City of Rochester, Minnesota, for at least **5%** the amount of the bid, which amount shall be forfeited to the City of Rochester, Minnesota, as liquidated damages if the bidder, upon the letting of the contract to him shall fail to enter into the contract so let; the Common Council reserving the right to reject any and all bids.

A Performance and Payment Bond for the full amount of the contract by a surety company authorized to do business in the State of Minnesota will be required with the contract. (Personal bonds will not be accepted.)

Minimum wage rates to be paid by the Contractors have been predetermined and are subject to the Work Hours Act of 1962, P.L. 87-581 and implementing regulations.



Department of Public Works  
201 4<sup>th</sup> Street SE, Room 108  
Rochester, MN 55904-3740  
(507) 328-2400

---

**READ CAREFULLY THE WAGE SCALES AND DIVISION A OF THE SPECIAL**

**PROVISIONS AS THEY AFFECT THIS/THESE PROJECT/PROJECTS**

The Minnesota Department of Transportation hereby notifies all bidders:

in accordance with Title VI of the Civil Rights Act of 1964 (Act), as amended and Title 49, Code of Federal Regulations, Subtitle A Part 21, Non-discrimination in Federally-assisted programs of the Department of Transportation, it will affirmatively assure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded maximum opportunity to participate and/or to submit bids in response to this invitation, and will not be discriminated against on the grounds of race, color, disability, age, religion, sex or national origin in consideration for an award;

in accordance with Title VI of the Civil Rights Act of 1964 as amended, and Title 23, Code of Federal Regulations, Part 230 Subpart A-Equal Employment Opportunity on Federal and Federal-Aid Construction Contracts (including supportive services), it will affirmatively assure increased participation of minority groups and disadvantaged persons and women in all phases of the highway construction industry, and that on any project constructed pursuant to this advertisement equal employment opportunity will be provided to all persons without regard to their race, color, disability, age, religion, sex or national origin;

in accordance with the Minnesota Human Rights Act, Minnesota Statute 363A.08 Unfair discriminatory Practices, it will affirmatively assure that on any project constructed pursuant to this advertisement equal employment opportunity will be offered to all persons without regard to race, color, creed, religion, national origin, sex, marital status, status with regard to public assistance, membership or activity in a local commission, disability, sexual orientation, or age;

in accordance with the Minnesota Human Rights Act, Minnesota Statute 363A.36 Certificates of Compliance for Public Contracts, and 363A.37 Rules for Certificates of Compliance, it will assure that appropriate parties to any contract entered into pursuant to this advertisement possess valid Certificates of Compliance.

If you are not a current holder of a compliance certificate issued by the Minnesota Department of Human Rights and intend to bid on any job in this advertisement you must contact the Department of Human Rights immediately for assistance in obtaining a certificate.

The following notice from the Minnesota Department of Human Rights applies to all contractors:

"It is hereby agreed between the parties that Minnesota Statute, section 363A.36 and Minnesota Rules, parts 5000.3400 to 5000.3600 are incorporated into any contract between these parties based on this specification or any modification of it. A copy of Minnesota Statute 363A.36 and Minnesota Rules, parts 5000.3400 to 5000.3600 is available upon request from the contracting agency."

"It is hereby agreed between the parties that this agency will require affirmative action requirements be met by contractors in relation to Minnesota Statute 363A.36 and Minnesota Rules 5000.3600. Failure by a contractor to implement an affirmative action plan or make a good faith effort shall result in revocation of its certificate or revocation of the contract (Minnesota Statute 363A.36, Subd. 2 and 3)."

A minimum goal of **7.8%** Good Faith Effort to be subcontracted to Disadvantaged Business Enterprises.

All proposals must be addressed to the City Clerk, City of Rochester, 201 4th St. SE, Room 135, Rochester, Minnesota 55904-3742 and shall have endorsed thereon:

**State No .....SP 159-166-001 & 159-167-001**

**Federal No ...STPX 5511 ( 257 )**

**City No .....M7-18 (J7257)**

**Reconstruct Pinewood Rd from 11th Ave SE (CSAH 1) to 30th Avenue SE & 30th Ave SE from Pinewood Rd to Marion Rd (CSAH 36)**

Dated at Rochester, Minnesota this **15<sup>th</sup>** day of August, 2011.

**JUDY K. SCHERR, CMC, City Clerk**

***NOTICE TO ALL BIDDERS -- TO REPORT BID RIGGING***

To report bid rigging activities call:

**1-800-424-9071**

The U.S. Department of Transportation (DOT) operates the above tollfree "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m., Eastern Time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.



***LIMITATION ON USE OF CONTRACT FUNDS FOR LOBBYING***

Appendix C to Part \_\_\_\_ - Contract Clause  
**NEW RESTRICTIONS ON LOBBYING**

(a) Definitions. As used in this clause,

"Agency", as defined in 5 U.S.C. 552(f), includes Federal Executive departments and agencies as well as independent regulatory commissions and Government corporations, as defined in 31 U.S.C. 9101(1).

"Covered Federal action" means any of the following Federal actions:

- (1) The awarding of any Federal contract;
- (2) The making of any Federal grant;
- (3) The making of any Federal loan;
- (4) The entering into of any cooperative agreement; and,
- (5) The extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

Covered Federal action does not include receiving from an agency a commitment providing for the United States to insure or guarantee a loan.

"Indian tribe" and "tribal organization" have the meaning provided in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450B). Alaskan Natives are included under the definitions of Indian tribes in that Act.

"Influencing or attempting to influence" means making, with the intent to influence, any communication to or appearance before an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any covered Federal action.

"Local government" means a unit of government in a State and, if chartered, established, or otherwise recognized by a State for the performance of a governmental duty, including a local public authority, a special district, an intrastate district, a council of governments, a sponsor group representative organization, and any other instrumentality of a local government.

"Officer or employee of an agency" includes the following individuals who are employed by an agency:

- (1) An individual who is appointed to a position in the Government under title 5, U.S. Code, including a position under a temporary appointment;
  - (2) A member of the uniformed services as defined in section 101(3), title 37, U.S. Code;
  - (3) A special Government employee as defined in section 202, title 18, U.S. Code;
- and,
- (4) An individual who is a member of a Federal advisory committee, as defined by the Federal Advisory Committee Act, title 5, U.S. Code appendix 2.

Page 1 of 6

"Person" means an individual, corporation, company, association, authority, firm, partnership, society, State, and local government, regardless of whether such entity is operated for profit or not for profit. This term excludes an Indian tribe, tribal organization, or any other Indian organization with respect to expenditures specifically permitted by other Federal law.

"Reasonable compensation" means, with respect to a regularly employed officer or employee of any person, compensation that is consistent with the normal compensation for such officer or employee for work that is not furnished to, not funded by, or not furnished in cooperation with the Federal Government.

"Reasonable payment" means, with respect to professional and other technical services, a payment in an amount that is consistent with the amount normally paid for such services in the private sector.

"Recipient" includes all contractors and subcontractors at any tier in connection with a Federal contract. The term excludes an Indian tribe, tribal organization, or any other Indian organization with respect to expenditures specifically permitted by other Federal law.

"Regularly employed" means, with respect to an officer or employee of a person requesting or receiving a Federal contract, an officer or employee who is employed by such person for at least 130 working days within one year immediately preceding the date of the submission that initiates agency consideration of such person for receipt of such contract. An officer or employee who is employed by such person for less than 130 working days within one year immediately preceding the date of the submission that initiates agency consideration of such person shall be considered to be regularly employed as soon as he or she is employed by such person for 130 working days.

"State" means a State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, a territory or possession of the United States, an agency or instrumentality of a State, and a multi-State, regional, or interstate entity having governmental duties and powers.

(b) Prohibition.

(1) Section 1352 of title 31, U.S. Code provides in part that no appropriated funds may be expended by the recipient of a Federal contract, grant, loan, or cooperative agreement to pay any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any of the following covered Federal actions: the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) The prohibition does not apply as follows:

(i) Agency and legislative liaison by Own Employees.

(A) The prohibition on the use of appropriated funds, in paragraph (1) of this section, does not apply in the case of a payment of reasonable

compensation made to an officer or employee of a person requesting or receiving a Federal activities not directly related to a covered Federal action.

(B) For purposes of paragraph (A) of this section, providing any information specifically requested by an agency or Congress is allowable at any time.



- (C) For purposes of paragraph (A) of this section, the following agency and legislative liaison activities are allowable at any time only where they are not related to a specific solicitation for any covered Federal action:
    - (i) Discussing with an agency (including individual demonstrations) the qualities and characteristics of the person's products or services, conditions or terms of sale, and service capabilities; and,
    - (ii) Technical discussions and other activities regarding the application or adaptation of the person's products or services for an agency's use.
  - (D) For purposes of paragraph (A) of this section, the following agency and legislative liaison activities are allowable only where they are prior to formal solicitation of any covered Federal action:
    - (i) Providing any information not specifically requested but necessary for an agency to make an informed decision about initiation of a covered Federal action;
    - (ii) Technical discussions regarding the preparation of an unsolicited proposal prior to its official submission; and,
    - (iii) Capability presentations by persons seeking awards from an agency pursuant to the provisions of the Small Business Act, as amended by Public Law 95-507 and other subsequent amendments.
  - (E) Only those activities expressly authorized by paragraph (i) of this section are allowable under paragraph (i).
- (ii) Professional and Technical Services by Own Employees.
- (A) The prohibition on the use of appropriated funds, in paragraph (1) of this section, does not apply in the case of a payment of reasonable compensation made to an officer or employee of a person requesting or receiving a Federal contract or an extension, continuation, renewal, amendment, or modification of a Federal contract if payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal contract or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal contract.
  - (B) For purposes of paragraph (A) of this section, "professional and technical services" shall be limited to advice and analysis directly



applying any professional or technical discipline. For example, drafting of a legal document accompanying a bid or proposal by a lawyer is allowable. Similarly, technical advice provided by an engineer on the performance or operational capability of a piece of equipment rendered directly in the negotiation of a contract is allowable. However, communications with the intent to influence made by a professional (such as a licensed lawyer), or a technical person (such as a licensed accountant) are not allowable under this section unless they provide advice and analysis directly applying their professional or technical expertise and unless the advice or analysis is rendered directly and solely in the preparation, submission or negotiation of a covered Federal action. Thus, for example, communications with the intent to influence made by a lawyer that do not provide legal advice or analysis directly and solely related to the legal aspects of his or her client's proposal, but generally advocate one proposal over another are not allowable under this section because the lawyer is not providing professional legal services. Similarly, communications with the intent to influence made by an engineer providing an engineering analysis prior to the preparation or submission of a bid or proposal are not allowable under this section since the engineer is providing technical services but not directly in the preparation, submission or negotiation of a covered Federal action.

- (C) Requirements imposed by or pursuant to law as a condition for receiving a covered Federal award include those required by law or regulation, or reasonably expected to be required by law or regulation, and any other requirements in the actual award documents.
- (D) Only those services expressly authorized by paragraph (ii) of this section are allowable under paragraph (ii).
- (iii) Reporting for Own Employees.  
No reporting is required with respect to payments of reasonable compensation made to regularly employed officers or employees of a person.
- (iv) Professional and technical services by Other than Own Employees.
  - (A) The prohibition on the use of appropriated funds, in paragraph (1) of this section, does not apply in the case of any reasonable payment to a person, other than an officer or employee of a person requesting or receiving a covered Federal action, if the payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal contract or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal contract.



- (B) For purposes of paragraph (A) of this section, "professional and technical services" shall be limited to advice and analysis directly applying any professional or technical discipline. For example, drafting of a legal document accompanying a bid or proposal by a lawyer is allowable. Similarly, technical advice provided by an engineer on the performance or operational capability of a piece of equipment rendered directly in the negotiation of a contract is allowable. However, communications with the intent to influence made by a professional (such as a licensed lawyer) or a technical person (such as a licensed accountant) are not allowable under this section unless they provide advice and analysis directly applying their professional or technical expertise unless the advice or analysis is rendered directly and solely in the preparation, submission or negotiation of a covered Federal action. Thus, for example, communications with the intent to influence made by a lawyer that do not provide legal advice or analysis directly and solely related to the legal aspects of his or her client's proposal, but generally advocate one proposal over another are not allowable under this section because the lawyer is not providing professional legal services. Similarly, communications with the intent to influence made by an engineer providing an engineering analysis prior to the preparation or submission of a bid or proposal are not allowable under this section since the engineer is providing technical services but not directly in the preparation, submission or negotiation of a covered Federal action.
- (C) Requirements imposed by or pursuant to law as a condition for receiving a covered Federal award include those required by law or regulation, or reasonably expected to be required by law or regulation, and any other requirements in the actual award documents.
- (D) Persons other than officers or employees of a person requesting or receiving a covered Federal action include consultants and trade associations.
- (E) Only those services expressly authorized by paragraph (iv) of this section are allowable under paragraph (iv).

(c) Disclosure.

(1) Each person who requests or receives from an agency a Federal contract shall file with that agency a certification, set forth in \_\_\_\_\_, that the person has not made, and will not make, any payment prohibited by paragraph (b) of this clause.

(2) Each person who requests or receives from an agency a Federal contract shall file with that agency a disclosure form, Standard Form-LLL, "Disclosure of Lobbying Activities," if such person has made or has agreed to make any payment using nonappropriated funds (to include profits from any covered Federal action), which would be prohibited under paragraph (b) of this clause if paid for with appropriated funds.

(3) Each person shall file a disclosure form at the end of each calendar quarter in which there occurs any event that requires disclosure or that materially affects the accuracy of the information contained in any disclosure form previously filed by such person under paragraph (2) of this section. An event that materially affects the accuracy of this information reported includes:

- (i) A cumulative increase of \$25,000 or more in the amount paid or expected to be paid for influencing or attempting to influence a covered Federal action; or
- (ii) A change in the person(s) or individual(s) influencing or attempting to influence a covered Federal action; or,
- (iii) A change in the officer(s), employee(s), or Member(s) contacted to influence or attempt to influence a covered Federal action.

(4) Any person who requests or receives from a person referred to in paragraph (1) of this section a subcontract exceeding \$100,000 at any tier under a Federal contract shall file a certification, and a disclosure form, if required, to the next tier above.

(5) All disclosure forms, but not certifications, shall be forwarded from tier to tier until received by the person referred to in paragraph (1) of this section. That person shall forward all disclosure forms to the agency.

(d) Agreement. In accepting any contract resulting from this solicitation, the person submitting the offer agrees not to make any payment prohibited by this clause.

(e) Penalties.

(1) Any person who makes an expenditure prohibited under paragraph (b) of this clause shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 of each such expenditure.

(2) Any person who fails to file or amend the disclosure form to be filed or amended if required by this clause, shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 or each such failure.

(3) Contractors may rely without liability on the representations made by their subcontractors in the certification and disclosure form.

(f) Cost allowability. Nothing in this clause is to be interpreted to make allowable or reasonable any costs which would be unallowable or unreasonable in accordance with Part 31 or the Federal Acquisition Regulation. Conversely, costs made specifically unallowable by the requirements in this clause will not be made allowable under any of the provisions of Part 31 of the Federal Acquisition Regulation.

(End of Clause)

BILLING CODE 3110-01-M

Page 6 of 6



FEDERAL-AID PROJECT

***NOTICE (BY SIGNING AND SUBMITTING THIS PROPOSAL)***

By signing and submitting this proposal, the prospective primary bidder is providing the certification set out below. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why he/she cannot provide the certification set out below. Certification or explanation will be considered concerning the City of Rochester's determination whether to enter this transaction. Failure of the prospective primary participant to furnish a certification or a written explanation why he/she cannot provide the certification shall disqualify such people from participation in this transaction.

The certification in this clause is a material representation of fact upon which reliance was placed when the City of Rochester decided to enter this transaction. If it is later decided that the prospective primary participant knowingly rendered an erroneous certification, beyond other remedies available to the Federal Government, the City of Rochester may end this transaction for cause of default. The prospective primary participant shall provide immediate written notice to the City of Rochester if any time the prospective primary participant learns that his/her certification was erroneous when submitted or has become erroneous due to changed circumstances.

The terms covered transaction, debarred, suspended, ineligible, lower tier covered transaction, participant, person, primary covered transaction, principal, proposal, and voluntarily excluded as used in this clause have the meanings set out in the Definition and Coverage sections of the rules carrying out Federal Executive Order 12549 dated February 18, 1986. Bidders may contact Mn/DOT for assistance in obtaining a copy of these regulations.

The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered, he/she shall not knowingly enter any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction unless authorized by the City of Rochester and Mn/DOT. Nothing contained in this shall be construed to require establishment of system of records to render in good faith the certification required by this clause. The knowledge and information of a participant are not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

The prospective primary participant further agrees by submitting this proposal that he/she will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction" provided by Mn/DOT without modification in all solicitations for lower tier covered transactions. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that he/she and his/her principals are not debarred, suspended, ineligible, or voluntarily excluded, from the covered transaction by any Federal agency, unless he/she knows that the certification is erroneous. A participant may decide the method and frequency by which he/she decides the eligibility of his/her principals.

Except as authorized by Mn/DOT, if a participant in a covered transaction knowingly enters a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, beyond other remedies available to the Federal Government, the City of Rochester may end this transaction for cause or default.

Certification Regarding Debarment, Suspension, and Other  
Responsibility Matters-Primary Covered Transactions

(I)(We) certify that the firm or any person associated with it in the capacity of owner, partner, director, officer, project director, manager auditor, or any position involving the administration of Federal funds:

- . are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntary excluded from covered transactions by any Federal department or agency;
- . have not within the three-year period preceding this proposal been convicted of or had a civil judgment rendered for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; or violation of Federal or State antitrust statutes; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements; or receiving stolen property;
- . are not presently indicted for or otherwise criminally or civilly charged by a governmental entity with commission of any of the above enumerated offenses;
- . have not within a three year period preceding this application/proposal had one or more transactions (Federal, State, or local) terminated for cause or default.

Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participants shall attach an explanation to this proposal.

(I)(We) agree that (my)(our) signatures on this proposal form certification of "status" under penalty of perjury under the laws of the United States.



***NOTICE TO BIDDERS (TRAFFIC CONTROL PREVAIL WAGE)***

The following defines the United States Department of Labor's interpretation of contract labor provision coverage for employees who work for traffic control companies and /or perform traffic control duties.

**Non-covered Supplier Designated Duties:**

Employees of bona fide "Material Persons/Suppliers" are not covered. A Material Person/Supplier is limited to supply, delivery, and routine maintenance (once a week) of barricades, cones, flashers, etc. to the job site.

The following functions, except as qualified in "6." below, do not come under the prevailing wage requirements of the contracts:

1. Supply and delivery of traffic control devices such as barricades, cones, barrels, flashers and signboards.
2. Routine and periodic maintenance service (usually once a week).
3. Removal of equipment from job site.
4. In connection with delivery, they may drop the equipment at a central stockpile location or at various locations along the project. Employees of company may set-up the equipment as long as such set-up is by dropping barrels and cones from the back of a moving truck.
5. Maintenance would consist of inspecting and cleaning the equipment, replacing broken or lost equipment, replacing barricades knocked down or out of line, and changing light bulbs and barricades.
6. If an employee spends more than 20% of their workweek performing the above duties on a Davis-Bacon (Federal-Aid) project or other Davis-Bacon (Federal-Aid) projects, prevailing wage rates would apply for the time so spent.

**Covered Contractor or Subcontractor Duties:**

The following functions are covered under the contract labor provisions. Any contractor performing these duties will need to be listed on a Request to Sublet form and their employees performing the duties will need to be listed on a Certified Payroll form and submitted following the appropriate procedures.

Related and continuing traffic control services such as, but not limited to:

1. Moving barricades and barriers as construction work progresses.
2. Moving barricades for lane closures and changes.
3. Painting traffic lines.
4. Sandblasting to remove traffic lines.
5. Applying and removing traffic tape.
6. Setting up barrels or barricades other than those dropped from the back of a moving truck.
7. Digging postholes to erect temporary warning signs (only).
8. Erection of advance temporary warning signs.
9. Placing temporary signboards.

On Federal-aid Projects (only) when there is no appropriate classification listed under either the state or federal wage determinations, a classification wage rate will be negotiated using the procedures under FHWA 1273, REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS, Part IV. PAYMENT OF PREDETERMINED MINIMUM WAGE, Subp. 2. Classifications.



***NOTICE TO BIDDERS – SUSPENSIONS / DEBARMENTS***

**DEPARTMENT OF TRANSPORTATION**

**NOTICE OF SUSPENSION**

**NOTICE IS HEREBY GIVEN** that the Department of Transportation (Mn/DOT) has ordered that the following vendors be suspended effective December 28, 2009, until final disposition of the hearing or hearing appeal:

Riley Bros. Companies Inc. and its affiliates, Morris MN  
Riley Bros. Construction Inc. and its affiliates, Morris MN  
Riley Bros. Properties, LLC, and its affiliates, Morris MN  
Riley Bros. Utilities, Inc. dba/Chris Riley Utilities, Inc. and its affiliates, Morris MN

**NOTICE OF DEBARMENT**

**NOTICE IS HEREBY GIVEN** that the Department of Transportation (Mn/DOT) has ordered that the following vendors be debarred for a period of three (3) years effective February 24, 2010 until February 24, 2013:

Joseph Edward Riley, Morris, MN

John Thomas Riley, Morris, MN

**NOTICE IS HEREBY GIVEN** that the Department of Transportation (Mn/DOT) has ordered that the following vendors be debarred for a period of three (3) years effective March 25, 2011 until March 25, 2014:

Philip Joseph Franklin

Franklin Drywall Inc. and its affiliates, Little Canada, MN

Master Drywall Inc. and its affiliates, Little Canada, MN

Minnesota Statutes, Section 161.315, prohibits the Commissioner, counties, towns or home rule or statutory cities from awarding or approving the award of a contract for goods or services to a person who is suspended or debarred; including

- 1) any contract under which a debarred or suspended person will serve as a subcontractor or material supplier,
- 2) any business or affiliate which the debarred or suspended person exercises substantial influence or control, and
- 3) any business or entity which is sold or transferred by a debarred person remains ineligible during the period of the seller's or transfer's debarment.



May 11, 2011

Page 2 of 2

**DEPARTMENT OF ADMINISTRATION**

The Department of Administration in accordance with Minnesota Rules 1230.1150 has debarred and disqualified the following persons and businesses from entering into or receiving a State of Minnesota contract.

NAME	DATE OF DEBARMENT
Joseph Edward Riley East 7th Street & Highway 59 Bypass Morris, Minnesota 56267	November 9, 2009 Through November 9, 2012
John Thomas Riley East 7th Street & Highway 59 Bypass Morris, Minnesota 56267	November 9, 2009 Through November 9, 2012
Riley Bros. Construction, Inc. East 7th Street & Highway 59 Bypass Morris, Minnesota 56267	November 9, 2009 Through November 9, 2012
Riley Bros. Companies Inc. East 7th Street & Highway 59 Bypass Morris, Minnesota 56267	November 9, 2009 Through November 9, 2012
Polyphase Electric Company 2515 West Superior Street Duluth, MN 55816-0151	May 5, 2010 Through May 5, 2012
Frances Harkonen 2515 West Superior Street Duluth, MN 55816-0151	May 5, 2010 Through May 5, 2012

Minnesota Rules Part 1230.1150, Subpart 6 requires the Materials Management Division to maintain a master list of all suspensions and debarments. The master list must retain all information concerning suspensions and debarments as a public record for at least three years following the end of a suspension or debarment. This list can be found at:

<http://www.mmd.admin.state.mn.us/debarredreport.asp>



Department of Public Works  
201 4<sup>th</sup> Street SE, Room 108  
Rochester, MN 55904-3740  
(507) 328-2400

---

**NOTICE TO BIDDERS – DISADVANTAGED BUSINESS ENTERPRISE (DBE) REQUIREMENT**

This project has a Disadvantaged Business Enterprise (DBE) requirement.

If you are the apparent low bidder, you will be required to submit certain DBE documents to the Office of Civil Rights at the Minnesota Department of Transportation **within five (5) business days after the bid opening date** (the five day period starts the next business day after the bid opening date). Failure to do so could result in **disqualification** as the lowest responsible bidder and award proceedings may then be initiated with the next lowest responsible bidder.

The local agency will attempt to notify the apparent low bidder as soon as possible after the bids are opened and examined. To ensure that the apparent low bidder is notified in a timely manner it is required to have the contact information for at least one responsible party and an alternate party – at least one of whom must be available immediately after the bids have been examined – capable of commencing the DBE document submittal.

Fill in the contact information in the spaces provided.

Responsible party:

Name: \_\_\_\_\_

Telephone: \_\_\_\_\_

Fax: \_\_\_\_\_

Email address: \_\_\_\_\_

Postal address: \_\_\_\_\_

\_\_\_\_\_

Alternate party:

Name: \_\_\_\_\_

Telephone: \_\_\_\_\_

Fax: \_\_\_\_\_

Email address: \_\_\_\_\_

Postal address: \_\_\_\_\_

\_\_\_\_\_

## FEDERALLY FUNDED CONSTRUCTION CONTRACTS SPECIAL PROVISIONS DIVISION A - LABOR

February 1, 2006

### I PREAMBLE

It is in the public interest that public buildings and other public works projects be constructed and maintained by the best means and the highest quality of labor reasonably available and that persons working on public works projects be compensated according to the real value of the services they perform.<sup>1</sup>

Therefore, the department shall administer this contract pursuant to the **Federal Davis-Bacon and Related Acts, Required Contract Provisions Federal-Aid Construction Contracts, Form-1273, U.S. Department of Labor's Field Operations Handbook, State of Minnesota Statutes and Rules, MN/DOT's Standard Specifications for Construction, MN/DOT's Contract Administration Manual and MN/DOT's State Aid Manual.**

### II DEFINITIONS<sup>2</sup>

- A. **Contract:** The written agreement between the contracting authority and the prime contractor setting forth their obligations, including, but not limited to, the performance of the work, the furnishing of labor and materials, the basis of payment, and other requirements contained in the contract documents.
- B. **Contracting Authority:** The political subdivision, governmental body, board, department, commission, or officer making the award and execution of contract as the party of the first part.
- C. **Contractor:** The term "contractor" in these provisions shall include the prime contractor, subcontractor, agent, or other person doing or contracting to do all or part of the work under this contract.<sup>3</sup>
- D. **Department:** The Department of Transportation of the State of Minnesota, or the political subdivision, governmental body, board, commission, office, department, division, or agency constituted for administration of the contract work within its jurisdiction.
- E. **First Tier Subcontractor:** An individual, firm, corporation, or other entity to which the prime contractor sublets part of the contract.
- F. **Independent Truck Owner/Operator (ITO):** An individual, partnership, or principal stockholder of a corporation who owns or holds a vehicle under lease and who contracts that vehicle and the owner's services to an entity that provides construction services to a public works project.<sup>4</sup>
- G. **Laborer or Mechanic:** A worker in a construction industry labor class identified in or pursuant to Minnesota Rules 5200.1100, Master Job Classifications.<sup>5</sup>
- H. **Plan:** The plan, profiles, typical cross-sections, and supplemental drawings that show the locations, character, dimensions, and details of the work to be done.
- I. **Prime Contractor:** The individual, firm, corporation, or other entity contracting for and undertaking prosecution of the prescribed work; the party of the second part to the contract, acting directly or through a duly authorized representative.

<sup>1</sup> Minnesota Statute 177.41

<sup>2</sup> MN/DOT Standard Specifications for Construction, Section 1103

<sup>3</sup> Minnesota Statute 177.44, Subdivision 1

<sup>4</sup> Minnesota Rules 5200.1106, Subpart 7(A)

<sup>5</sup> Minnesota Rules 5200.1106, Subpart 5(A)



- J. **Project:** The specific section of the highway, the location, or the type of work together with all appurtenances and construction to be performed under the contract.
- K. **Second Tier Subcontractor:** An individual, firm, corporation, or other entity to which a first tier subcontractor sublets part of the contract.
- L. **Special Provisions:** Additions and revisions to the standard and supplemental specifications covering conditions peculiar to an individual project.
- M. **Specifications:** A general term applied to all directions, provisions, and requirements pertaining to performance of the work.
- N. **Subcontractor:** An individual, firm, corporation, or other entity to which the prime contractor or subcontractor sublets part of the contract.
- O. **Substantially In Place:** Mineral aggregate is deposited on the project site directly or through spreaders where it can be spread from or compacted at the location where it was deposited.<sup>6</sup>
- P. **Trucking Broker:** An individual or business entity, the activities of which include, but are not limited to: contracting to provide trucking services in the construction industry to users of such services, contracting to obtain such services from providers of trucking services, dispatching the providers of the services to do work as required by the users of the services, receiving payment from the users in consideration of the trucking services provided and making payment to the providers for the services.<sup>7</sup>
- Q. **Trucking Firm/Multiple Truck Owner (MTO):** Any business entity that owns more than one vehicle and hires the vehicles out for services to brokers or contractors on public works projects.<sup>8</sup>
- R. **Work:** The furnishing of all labor, materials, equipment, and other incidentals necessary or convenient to the successful completion of the project and the carrying out of all the duties and obligations imposed by the contract upon the contractor. Also used to indicate the construction required or completed by the contractor.

### III SCOPE – SPECIAL PROVISIONS DIVISION A & CONTRACT

- A. These provisions shall apply to this contract, which is funded in whole or in part with federal funds<sup>9</sup> and state funds.<sup>10</sup>
- B. These provisions shall apply to the prime contractor and all subcontractors contracting to do all or part of the work under this contract.<sup>11</sup>
- C. The provisions established in this document do not necessarily represent all federal, state, and local laws, ordinances, rules and regulations. It is the responsibility of the prime contractor to inform itself and all subcontractors about other regulations that may be applicable to this contract.
- D. The prime contractor is responsible to ensure that each subcontractor performing work under this contract receives copies of all required contract provisions.<sup>12</sup> These provisions shall be incorporated into written subcontracts and must be displayed on the poster board.<sup>13</sup>
- E. The department shall administer this contract in accordance with all applicable federal regulations, state statutes and rules<sup>14</sup>, along with the plans, specifications and provisions, which are incorporated into and found elsewhere in this contract.

<sup>6</sup> Minnesota Rules 5200.1106, Subpart 5(C)

<sup>7</sup> Minnesota Rules 5200.1106, Subpart 7(C)

<sup>8</sup> Minnesota Rules 5200.1106, Subpart 7(B)

<sup>9</sup> 29 CFR Part 5.5(a)

<sup>10</sup> Minnesota Statute 177.41

<sup>11</sup> Minnesota Statute 177.44, Subdivision 1

<sup>12</sup> 29 CFR Part 5.5(a)(6)

<sup>13</sup> Minnesota Statute 177.44, Subdivision 5

- F. An unpublished decision from the Minnesota Court of Appeals affirms the authority of the Minnesota Commissioner of Transportation to enforce the Minnesota Prevailing Wage Law on a case-by-case basis.<sup>15</sup> Therefore, the department shall provide enforcement in a manner consistent with the decision notwithstanding any prior notices on the subject.
- G. For additional information refer to: [www.dot.state.mn.us/const/labor/](http://www.dot.state.mn.us/const/labor/).

#### IV PAYROLLS AND STATEMENTS

- A. Each week, in which work was performed under this contract, all contractors shall submit a payroll statement to the department.<sup>16</sup> Each statement shall be submitted within seven days after the regular payment date of the payroll period.<sup>17</sup> Each payroll submitted shall include all employees that performed work under this contract and provide at a minimum the following information:<sup>18</sup>
1. Contractor's name, address, and telephone number.
  2. State project number.
  3. Payroll report number.
  4. Project location.
  5. Workweek ending date.
  6. Name, social security number, and home address for each employee.
  7. Labor classification(s) and/or three-digit code for each employee.
  8. Hourly straight time and overtime wage rates paid to each employee.
  9. Daily and weekly hours worked in each labor classification, including overtime hours for each employee.
  10. Authorized legal deductions for each employee.
  11. Project gross amount, weekly gross amount and net wages paid to each employee.
- B. Payroll records may be submitted in any form provided it includes all the information contained in **Subpart A (1 - 11)** of this section.<sup>19</sup> However, contractors needing a payroll form may utilize the "front side" of the **U.S. Department of Labor's, WH-347 – Payroll Form**. This form is available by visiting the Labor Compliance website.<sup>20</sup>
- C. All payroll records must be accompanied with a completed and signed MN/DOT, 21658 - **Statement of Compliance Form**.<sup>21</sup>
- D. The prime contractor is responsible for assuring that its payroll records and those of all subcontractors include all employees that performed work under this contract and accurately reflect the hours worked, regular and overtime rates of pay and classification of work performed.<sup>22</sup>
- E. The prime contractor is responsible to maintain all certified payroll records, including those of all subcontractors, throughout the course of a construction project and retain all records for a period of three years after the final contract voucher has been issued.<sup>23</sup>

---

<sup>14</sup> Minnesota Rules 8820.3000, Subpart 2

<sup>15</sup> Minnesota Court of Appeals Case Number: C6-97-1582

<sup>16</sup> Required Contract Provisions Federal-Aid Construction Contracts Form-1273, Section V, Subpart 2(c)

<sup>17</sup> 29 CFR Part 3.4(a)

<sup>18</sup> Minnesota Rules 5200.1106, Subpart 10

<sup>19</sup> Required Contract Provisions Federal-Aid Construction Contracts Form-1273, Section V, Subpart 2(c)

<sup>20</sup> [www.dot.state.mn.us/const/labor/](http://www.dot.state.mn.us/const/labor/)

<sup>21</sup> Minnesota Rules 5200.1106, Subpart 10

<sup>22</sup> 29 CFR Part 5.5(a)(6)

<sup>23</sup> Required Contract Provisions Federal-Aid Construction Contracts Form-1273, Section V, Subpart 2(a)



- F. At the end of each pay period, each contractor shall provide every employee, in writing, an accurate detailed earnings statement.<sup>24</sup>
- G. Upon request from the U.S. Department of Labor (U.S. DOL), Federal Highway Administration (FHWA), Minnesota Department of Labor and Industry (MN/DLI) or the Department, the prime contractor shall promptly furnish copies of payroll records for its workers and those of all subcontractors, along with other records, deemed appropriate by the requesting agency to determine compliance with these contract provisions.<sup>25</sup>
- H. At the department's discretion, the project engineer may administer the submission of payroll records according to MN/DOT's Payroll Maintenance Program. The guidelines for the implementation and administration of this program are outlined in the **MN/DOT Contract Administration Manual, Section A(4)(d)**. The program has not been approved for federal aid contracts administered by local units of government and will not be allowed for such contracts. However, the program may be utilized for local state-aid contracts.
- I. If, after written notice, the prime contractor fails to submit its payroll reports and certification forms and those of any subcontractor, the department may implement the actions prescribed in section **XVI (NON-COMPLIANCE AND ENFORCEMENT)**.

## **V WAGE RATES**

- A. The prime contractor is responsible to ensure that its workers and those of all subcontractors are compensated according to the U.S. DOL federal general decision(s) and the MN/DLI state prevailing wage determination(s) incorporated into and found elsewhere in this contract, whichever is greater. All contractors shall pay each worker the required minimum total hourly wage rate for all hours worked on the project and for the appropriate classification of labor.
  - 1. Federal building, heavy and highway general decisions are specific to the county in which the construction work is being performed; a decision does not cross county or state lines.<sup>26</sup> If a project extends into more than one county or state, the applicable wage decision for each county or state shall be incorporated into and found elsewhere in this contract.
  - 2. State highway and heavy wage determinations are specific to ten separate regions throughout the state of Minnesota. If a project extends into more than one region, the applicable wage decision for each region shall be incorporated into and found elsewhere in this contract.
    - a. If this contract contains multiple highway and heavy wage determinations, there shall be only one standard of hours of labor and wage rates.<sup>27</sup>
  - 3. State commercial wage determinations are specific to the county in which the construction work is being performed. If a project extends into more than one county, the applicable wage determination for each county shall be incorporated into and found elsewhere in this contract.
    - a. If this contract contains multiple commercial wage determinations, there shall be only one standard of hours of labor and wage rates.<sup>28</sup>
- B. Wage rates listed in the federal and/or state wage determination(s) contain two components: the hourly basic rate and the fringe rate; together they equal the total prevailing wage rate. A

<sup>24</sup> Minnesota Statute 181.032

<sup>25</sup> Minnesota Statute 177.44, Subdivision 7 and Minnesota Rules 5200.1106, Subpart 10

<sup>26</sup> 29 CFR Part 1.7(a)

<sup>27</sup> Minnesota Statute 177.44, Subdivision 4

<sup>28</sup> Minnesota Statute 177.44, Subdivision 4

Rev. 12/18/2006

contractor shall compensate a worker at a minimum, a combination of cash and fringe benefits equaling the total prevailing wage rate.<sup>29</sup>

- C. The applicable certified wage decisions incorporated into and found elsewhere in this contract remain in effect for the life of this contract. The wage decisions do not necessarily represent the workforce that can be obtained at the rates certified by the U.S. DOL or MN/DLI. It is the responsibility of the prime contractor and any subcontractor to inform themselves about local labor conditions and prospective changes or adjustments to the wage rates. No increase in this contract price shall be allowed or authorized due to wage rates that exceed those incorporated into this contract.
- D. A contractor shall not reduce a worker's private, regular rate of pay when the wage rate certified by the U.S. DOL or MN/DLI is less than the worker's normal hourly wage.<sup>30</sup>
- E. From the time a worker is required to report for duty at the project site until the worker is allowed to leave the site, no deductions shall be made from the worker's hours for any delays of less than twenty consecutive minutes.<sup>31</sup>
  - 1. In situations where a delay may exceed twenty consecutive minutes and the contractor requires a worker to remain on the premises or so close to the premises that the worker cannot use the time effectively for the worker's own purposes, the worker is considered "on-call"<sup>32</sup> and shall be compensated in accordance with **Subpart B** of this section, unless the worker is allowed or required to leave the project site.
- F. A contractor making payment to an employee, laborer, mechanic, worker, or truck owneroperator shall not accept a rebate for the purpose of reducing or otherwise decreasing the value of the compensation paid.<sup>33</sup>
- G. Any employee who knowingly permits a contractor to pay less than the total prevailing wage or gives up any part of the compensation to which the employee is entitled may be subject to penalties.<sup>34</sup>

## **VI BONA FIDE FRINGE BENEFITS**

- A. "funded" fringe benefit plan is one that allows the contractor to make irrevocable contributions on behalf of an employee to a financially responsible trustee, third person, fund, plan or program, without prior approval from the U.S. Department of Labor. Types of "funded" fringe benefits may include, but are not limited to: pension, health and life insurance.<sup>35</sup>
- B. An "unfunded" fringe benefit plan or program is one that allows the contractor to furnish an in-house benefit on behalf of an employee. The cost to provide the benefit is funded from the contractor's general assets rather than funded by contributions made to a trustee, third person, fund, plan or program. Types of "unfunded" fringe benefits may include, but are not limited to: holiday plans, vacation plans and sick plans.<sup>36</sup>
- C. Credit toward the total prevailing wage rate shall be determined for each individual employee and is allowed for bona fide fringe benefits that:<sup>37</sup>
  - 1. include contributions irrevocably made by a contractor on behalf of an employee to a financially responsible trustee, third person, fund, plan, or program;

<sup>29</sup> Minnesota Statute 177.42, Subdivision 6

<sup>30</sup> Minnesota Statute 181.03, Subdivision 1(2)

<sup>31</sup> Minnesota Rules 5200.0120, Subpart 1

<sup>32</sup> Minnesota Rules 5200.0120, Subpart 2

<sup>33</sup> Minnesota Rules 5200.1106, Subpart 6

<sup>34</sup> Minnesota Statute 177.44, Subdivision 6

<sup>35</sup> 29 CFR Parts 5.26 and 5.27

<sup>36</sup> 29 CFR Part 5.28

<sup>37</sup> 29 CFR Part 5.23



2. are legally enforceable;
  3. have been communicated in writing to the employee; and
  4. are made available to the employee once he/she has met all eligibility requirements.
- D. No credit shall be allowed for benefits required by federal, state or local law, such as: worker's compensation, unemployment compensation, and social security contributions.<sup>38</sup>
- E. Upon request from the Minnesota Department of Labor and Industry (MN/DLI) or the Department, the prime contractor shall promptly furnish copies of fringe benefit records for its workers and those of all subcontractors, along with other records, deemed appropriate by the requesting agency to determine compliance with these contract provisions.<sup>39</sup>
- F. In addition to the requirements set forth in Subpart C of this section, it is the responsibility of the prime contractor and any subcontractor to inform themselves about other federal and state fringe benefit regulations that may be applicable to this contract.
- G. Contractors shall submit a completed and signed MN/DOT, 21658 - Statement of **Compliance Form**, identifying any fringe contributions made on behalf of a worker.<sup>40</sup> The form must be submitted in accordance with section **IV (PAYROLLS AND STATEMENTS), Subparts A and C**.
- H. Pursuant with Minnesota Statute 181.74, Subdivision 1, a contractor that is obligated to deposit fringe benefit contributions on behalf of its employees into a financially responsible trustee, third person, fund, plan, or program and fails to make timely contributions may be guilty of a gross misdemeanor. A contractor found in violation of the above-mentioned statute shall compel the department to take such actions as prescribed in section **XVI, (NONCOMPLIANCE AND ENFORCEMENT)**.

## VII OVERTIME

- A. A contractor shall not permit or require a worker to work in excess of 40 hours per week unless the worker is compensated at a rate not less than 1-1/2 times the basic hourly rate as determined by the United States Secretary of Labor.<sup>41</sup>
- B. A contractor shall not permit or require a worker to work longer than the prevailing hours of labor unless the worker is paid for all hours in excess of the prevailing hours at a rate of at least 1-1/2 times the hourly basic hourly rate of pay.<sup>42</sup> The prevailing hours of labor is defined as not more than 8 hours per day or more than 40 hours per week.<sup>43</sup>
- C. In addition to the requirements set forth in Subparts A and B of this section, it is the responsibility of the prime contractor and any subcontractor to inform themselves about other federal and state overtime regulations that may be applicable to this contract.

## VIII LABOR CLASSIFICATIONS

- A. All contractors shall refer to the federal general decision or the state wage determination incorporated into and found elsewhere in this contract to obtain an applicable job classification. Workers must be classified and compensated for the actual work performed regardless of the worker's skill level.<sup>44</sup> The prime contractor shall ensure that all contractors adhere to the following requirements:

<sup>38</sup> 29 CFR Part 5.29(f)

<sup>39</sup> Minnesota Statute 177.44, Subdivision 7 and Minnesota Rules 5200.1106, Subpart 10

<sup>40</sup> Minnesota Rules 5200.1106, Subpart 10

<sup>41</sup> Required Contract Provisions Federal-Aid Construction Contracts Form-1273, Section IV, Subpart 7

<sup>42</sup> Minnesota Statute 177.44, Subdivision 1

<sup>43</sup> Minnesota Statute 177.42, Subdivision 4

<sup>44</sup> Required Contract Provisions Federal-Aid Construction Contracts Form-1273, Section IV, Subpart 1(a)



1. Prior to performing work under this contract, all contractors shall review the federal general decision and complete a **U.S. DOL, SF-1444 - Request for Authorization of Additional Classification and Wage Rate Form** for any labor classification missing from the decision and submit it to the MN/DOT Labor Compliance Unit for processing.<sup>45</sup>
2. If a contractor cannot determine an appropriate job classification, state law requires that the worker be assigned a job classification that is the "same or most similar".<sup>46</sup> Contractors should refer to the Master Job Classification List<sup>47</sup> to obtain an applicable labor classification. Clarification regarding labor classifications should be directed to the MN/DLI or the MN/DOT Labor Compliance Unit.

## **IX INDEPENDENT CONTRACTORS, OWNERS, SUPERVISORS AND FOREMAN**

- A. An independent contractor performing work as a laborer or mechanic is subject to the contract prevailing wage requirements<sup>48</sup> for the classification of work performed and shall adhere to the requirements established in sections **IV (PAYROLLS AND STATEMENTS); V (WAGE RATES); VI (FRINGE BENEFITS); VII (OVERTIME) and VIII (LABOR CLASSIFICATIONS)**. In order to ensure compliance, the department may examine the subcontract agreement to determine if the bid price submitted covers the applicable prevailing wage rate for the number of hours worked, along with other records, deemed appropriate by the department.<sup>49</sup>
- B. Pursuant with state regulations, owners, supervisors and foreman performing work under the contract<sup>50</sup> shall be compensated in accordance with section **V (WAGE RATES)**. Furthermore, the prime contractor and any subcontractor shall adhere to the requirements established in sections **IV (PAYROLLS AND STATEMENTS); VI (FRINGE BENEFITS); VII (OVERTIME) and VIII (LABOR CLASSIFICATIONS)**.
- C. Pursuant with federal regulations, the contract labor provisions do not apply to owners, supervisors or foreman whose duties are primarily associated with bona fide administrative, executive or clerical positions. These individuals are not deemed to be laborers or mechanics.<sup>51</sup>
  1. However, working owners, supervisors and/or foreman who devote more than 20 percent of their time during a workweek to laborer or mechanic duties are considered laborers or mechanics for the time so spent and are subject to the requirements established in sections **IV (PAYROLLS AND STATEMENTS); V (WAGE RATES); VI (FRINGE BENEFITS); VII (OVERTIME) and VIII (LABOR CLASSIFICATIONS)**.

## **X APPRENTICES, TRAINEES AND HELPERS**

- A. An apprentice is not subject to the federal and/or state wage decisions incorporated into and found elsewhere in this contract, provided the contractor can demonstrate compliance with **Subparts (1 - 4)** of this section:<sup>52</sup>
  1. The apprentice is performing the work of his/her trade.
  2. The apprentice is registered with the U.S. DOL Bureau of Apprenticeship and Training or MN/DLI Division of Voluntary Apprenticeship.
  3. The apprentice is compensated according to the rate specified in the program for the level of progress.

<sup>45</sup> Required Contract Provisions Federal-Aid Construction Contracts Form-1273, Section IV, Subpart 2

<sup>46</sup> Minnesota Statute 177.44, Subdivision 1

<sup>47</sup> Minnesota Rules 5200.1100

<sup>48</sup> 29 CFR Part 5.2(o) and Minnesota Statute 177.41

<sup>49</sup> Minnesota Statute 177.44, Subdivision 7 and Minnesota Rules 5200.1106, Subpart 10

<sup>50</sup> Minnesota Statute 177.44, Subdivision 1

<sup>51</sup> 29 CFR Part 5.2(m)

<sup>52</sup> Minnesota Rules 5200.1070



4. The ratio of apprentices to journeyman workers on the project is not greater than the ratio permitted for the contractor's entire work force under the registered program.<sup>53</sup>
- B. A trainee is not subject to the federal general decision incorporated into and found elsewhere in this contract, provided the contractor can demonstrate compliance with **Subparts (1 - 4)** of this section:<sup>54</sup>
  1. The trainee is performing the work of his/her trade.
  2. The trainee is registered with the U.S. DOL Employment and Training Administration.
  3. The trainee is compensated according to the rate specified in the program for the level of progress.
  4. The ratio of trainees to journeyman workers on the project is not greater than the ratio permitted under the program.
  5. All hours worked in excess of the prescribed hours allowed under the program and/or this contract shall be paid at the journeyman wage rate incorporated into and found elsewhere in this contract.
  6. A trainee is not exempt under state law; the contractor shall assign the trainee a job classification that is the "same or most similar"<sup>55</sup> and compensate the trainee for the actual work performed regardless of the trainee's skill level, unless the trainee is:<sup>56</sup>
    - a. employed and registered in a bona-fide apprenticeship program; or
    - b. employed in the first 90 days of probationary employment as an apprentice, is not registered in the apprenticeship program, but has been certified by the proper government authorities to be eligible for probationary employment as an apprentice.
- C. A helper may perform work only if the helper classification is specified and defined in the federal general decision incorporated into and found elsewhere in this contract or is approved pursuant to the federal conformance procedure.<sup>57</sup>
  1. A helper is not exempt under state law; a contractor shall assign the helper a job classification that is the "same or most similar"<sup>58</sup> and compensate the helper for the actual work performed regardless of the helper's skill level.<sup>59</sup>
- D. If a contractor fails to demonstrate compliance with the terms established in **Subparts A – C** of this section, the contractor shall compensate the worker not less than the applicable total prevailing wage rate for the actual work performed.<sup>60</sup>

#### **XI SUBCONTRACTING PART OF THIS CONTRACT<sup>61</sup>**

- A. If the prime contractor intends to sublet any portion of this contract, it shall complete and submit a **MN/DOT, TP-21834, Request To Sublet Form** to the project engineer 10 days prior to the first day of work for any subcontractor.
- B. The prime contractor shall not subcontract any portion of this contract without prior written consent from the project engineer.

<sup>53</sup> MN/DOLI Division of Apprenticeship – April 6, 1995 Memorandum from Jerry Briggs, Director

<sup>54</sup> Required Contract Provisions Federal-Aid Construction Contracts Form-1273, Section IV, Subpart 4(b)

<sup>55</sup> Minnesota Statute 177.44, Subdivision 1

<sup>56</sup> Required Contract Provisions Federal-Aid Construction Contracts Form-1273, Section IV, Subpart 1(a)

<sup>57</sup> Required Contract Provisions Federal-Aid Construction Contracts Form-1273, Section IV, Subpart 4(c)

<sup>58</sup> Minnesota Statute 177.44, Subdivision 1

<sup>59</sup> Required Contract Provisions Federal-Aid Construction Contracts Form-1273, Section IV, Subpart 1(a)

<sup>60</sup> Required Contract Provisions Federal-Aid Construction Contracts Form-1273, Section IV, Subpart 4(a)(b)(c)

<sup>61</sup> MN/DOT Standard Specifications for Construction, Section 1801

- C. The prime contractor's organization shall perform work amounting to not less than 40 percent of the total original contract cost. However, contracts with Disadvantaged Business Enterprise (DBE) or Targeted Group Business (TGB) established goals, or both, the contractor's organization shall perform work amounting to not less than 30 percent of the total original contract cost.
- D. A first tier subcontractor shall not subcontract any portion of its work under this contract unless approved by the prime contractor and the project engineer. In addition, a first tier subcontractor may only subcontract up to 50% of its original subcontract.
- E. A second tier subcontractor shall not subcontract any portion of its work under this contract.
- F. Written consent to subcontract any portion of this contract does not relieve the prime contractor of liabilities and obligations under the contract and bonds.
- G. Contractors shall not subcontract with or purchase materials or services from a debarred or suspended person.<sup>62</sup>

## **XII POSTER BOARDS**

- A. The prime contractor shall construct and display a poster board, which contains all required posters, is legible and is accessible to all workers from the first day of work until the project is 100 percent complete.<sup>63</sup> The prime contractor is not allowed to place a poster board at an off-site location.
  - 1. The prime contractor can obtain the required posters by contacting MN/DOT at (651) 366-3091. The prime contractor will need to furnish its name, mailing address, the type of posters (federal-aid) and the quantity needed.

## **XIII EMPLOYEE INTERVIEWS**

- A. At any time the prime contractor shall permit representatives from the U.S. DOL, FHWA, MN/DLI, or the Department to interview its workers and those of any subcontractor during working hours on the project.<sup>64</sup>

## **XIV TRUCKING / OFF-SITE FACILITIES**

- A. The prime contractor is responsible to ensure that its workers and those of all subcontractors are compensated in accordance with the federal wage decision incorporated into and found elsewhere in this contract for the following work duties:
  - 1. The processing or manufacturing of material, including the hauling of material to and from an immediately adjacent, dedicated off-site facility.<sup>65</sup>
  - 2. The hauling of any or all stockpiled or excavated materials on the project work site to other locations on the same project.<sup>66</sup>
- B. The prime contractor is responsible to ensure that its workers and those of all subcontractors, are compensated in accordance with the state wage determination incorporated into and found elsewhere in this contract for the following work duties:
  - 1. The processing or manufacturing of material, including the hauling of material to and from a prime contractor's material operation that is not a separate commercial establishment.<sup>67</sup>

<sup>62</sup> Minnesota Statute 161.315, Subdivision 3(3)

<sup>63</sup> Required Contract Provisions Federal-Aid Construction Contracts Form-1273, Section IV, Subpart 1(a)

<sup>64</sup> Required Contract Provisions Federal-Aid Construction Contracts Form-1273, Section V, Subpart 2(g)

<sup>65</sup> 29 CFR Part 5.2(l)(2)

<sup>66</sup> 29 CFR Part 5.2(j)(1)

<sup>67</sup> ALJ Findings of Fact, Conclusions of Law, and Recommendation, Conclusions (7), Case #12-3000-11993-2



2. The processing or manufacturing of material, including the hauling of material to and from an off-site material operation that is not considered a commercial establishment.<sup>68</sup>
  3. The hauling of any or all stockpiled or excavated materials on the project work site to other locations on the same project even if the truck leaves the work site at some point.<sup>69</sup>
  4. The delivery of materials from a non-commercial establishment to the project and the return haul.<sup>70</sup>
  5. The delivery of materials from another construction project site to the public works project and the return haul, either empty or loaded. Construction projects are not considered commercial establishments.<sup>71</sup>
  6. The hauling required to remove any materials from the project to a location off the project site and the return haul, either empty or loaded from other than a commercial establishment.<sup>72</sup>
  7. The delivery of mineral aggregate materials from a commercial establishment, which is deposited "substantially in place" and the return haul, either empty or loaded.<sup>73</sup>
- C. The work duties prescribed in **Subpart A (1 - 2) and Subpart B (1 - 7)** of this section do not represent all possible hauling activities and/or other work duties that may be performed under this contract. It is the responsibility of the prime contractor to inform itself and all subcontractors about other applicable job duties that may be subject to this contract labor provisions.
- D. A contractor acquiring trucking services from an ITO, MTO and/or Truck Broker to perform and/or provide "covered" hauling activities shall comply with the payment of the certified state truck rental rates,<sup>74</sup> which are incorporated into and found elsewhere in this contract.
1. Each month, in which hauling activities were performed under this contract, the prime contractor and all subcontractors shall submit a **MN/DOT, TP-90550 - Month-End Trucking Report** and **MN/DOT, TP-90551 - Statement of Compliance Form**, along with each ITOs, MTOs and/or Truck Brokers reports to the department.<sup>75</sup> The specifications regarding the dates for submission can be found near the bottom of the **MN/DOT, TP-90551 - Statement of Compliance Form**.
- E. A Truck Broker contracting to provide trucking services in the construction industry may charge a reasonable broker fee to the provider of trucking services.<sup>76</sup> The prime contractor and any subcontractor contracting to receive trucking services shall not assess a broker fee.
- F. A contractor with employee truck drivers shall adhere to the requirements established in Sections IV (**PAYROLLS AND STATEMENTS**); V (**WAGE RATES**); VI (**FRINGE BENEFITS**); VII (**OVERTIME**) and VIII (**LABOR CLASSIFICATIONS**).
- G. If after written notice, the prime contractor fails to submit its month-end trucking reports and certification forms and those of any subcontractor, MTO and/or Truck Broker, the department may take such actions as prescribed in section **XVI, (NON-COMPLIANCE AND ENFORCEMENT)**.

<sup>68</sup> Minnesota Rules 5200.1106, Subpart 3B(2)

<sup>69</sup> Minnesota Rules 5200.1106, Subpart 3B(1)

<sup>70</sup> Minnesota Rules 5200.1106, Subpart 3B(2)

<sup>71</sup> Minnesota Rules 5200.1106, Subpart 3B(3)

<sup>72</sup> Minnesota Rules 5200.1106, Subpart 3B(4)

<sup>73</sup> Minnesota Rules 5200.1106, Subpart 3B(5)(6)

<sup>74</sup> Minnesota Rules 5200.1106, Subpart 1

<sup>75</sup> Minnesota Rules 5200.1106, Subpart 10

<sup>76</sup> Minnesota Rules 5200.1106, Subpart 7(C)

## **XV CHILD LABOR**

- A. No worker under the age of 18 is allowed to perform work on construction projects.<sup>77</sup>
- B. In accordance with state law, a worker under the age of 18, employed in a corporation totally owned by one or both parents that is supervised by the parent(s), may perform work on construction projects.<sup>78</sup> However, if this contractor is subject to the federal Fair Labor Standards Act, a worker under the age of 18 is not allowed to perform work in a hazardous occupation.<sup>79</sup>
- C. To protect the interests of the department, the project engineer may remove a worker that appears to be under the age of 18 from the construction project until the contractor or worker can demonstrate proof of age<sup>80</sup> and compliance with all applicable federal and/or state regulations.<sup>81</sup>

## **XVI NON-COMPLIANCE AND ENFORCEMENT**

- A. The prime contractor shall be liable for any unpaid wages to its workers or those of any subcontractor, ITO, MTO and/or Truck Broker.<sup>82</sup>
- B. If it is determined that a contractor has violated federal and/or state prevailing wage laws, or any portion of this contract, the department may implement, after written notice, one or more of the following sanctions:
  - 1. Withhold or cause to be withheld from the prime contractor under this contract, or any other federally funded contract with the same prime contractor, as much of the accrued payments or advances as may be considered necessary to pay workers employed by the prime contractor or any subcontractor the full amount of wages required by this contract.<sup>83</sup>
  - 2. Withhold or cause to be withheld from the prime contractor such amounts in considerations or assessments against the prime contractor, whether arising from this contract or other contract with the department.<sup>84</sup>
  - 3. The department may reject a bid from a prime contractor that has demonstrated continued or persistent noncompliance with the prevailing wage law on previous or current contracts with the department.<sup>85</sup>
  - 4. The department may take the prosecution of the work out of the hands of the prime contractor, place the contractor in default and terminate this contract for failure to demonstrate compliance with these provisions.<sup>86</sup>
- C. Any contractor who violates the state prevailing wage law is guilty of a misdemeanor and may be fined not more than \$300 or imprisoned not more than 90 days or both. Each day that the violation continues is a separate offense.<sup>87</sup>
- D. All required documents and certification reports are legal documents; willful falsification of the documents may result in civil action and/or criminal prosecution<sup>88</sup> and may be grounds for debarment proceedings.<sup>89</sup>

<sup>77</sup> Minnesota Rules 5200.0910, Subpart F

<sup>78</sup> Minnesota Rules 5200.0930, Subpart 4

<sup>79</sup> 29 CFR Part 570.2(a)(ii)

<sup>80</sup> Minnesota Statute 181A.06, Subdivision 4

<sup>81</sup> MN/DOT Standard Specifications for Construction, Section 1701

<sup>82</sup> MN/DOT Standard Specifications for Construction, Section 1801

<sup>83</sup> Required Contract Provisions Federal-Aid Construction Contracts Form-1273, Section IV, Subpart 6

<sup>84</sup> MN/DOT Standard Specifications for Construction, Section 1906

<sup>85</sup> Minnesota Statute 161.32, Subdivision 1(d)

<sup>86</sup> MN/DOT Standard Specifications for Construction, Section 1808

<sup>87</sup> Minnesota Statute 177.44, Subdivision 6

<sup>88</sup> Minnesota Statutes 16B, 161.315, Subdivision 2, 177.43, Subdivision 5 177.44, Subdivision 6, 609.63

<sup>89</sup> Minnesota Statute 161.315



**FEDERAL WAGE RATES**

General Decision Number: MN100015 06/03/2011 MN15

State: Minnesota

Construction Type: Highway

Counties: Dodge, Fillmore, Freeborn, Goodhue, Houston, Mower,  
Olmsted, Rice, Steele, Wabasha and Winona Counties in Minnesota.

**HIGHWAY CONSTRUCTION PROJECTS**

Modification Number	Publication Date
0	09/10/2010
1	12/03/2010
2	02/04/2011
3	06/03/2011

\* SUMN2010-006 05/01/2010

	Rates	Fringes
BRICKLAYER.....	\$ 31.19	13.00
CARPENTER.....	\$ 29.43	13.69
CEMENT MASON/CONCRETE FINISHER...	\$ 34.36	7.90
ELECTRICIAN		
Electrician.....	\$ 31.08	15.15
Ground Person.....	\$ 17.61	9.06
Lineman.....	\$ 36.04	15.64
IRONWORKER.....	\$ 34.10	20.37
LABORER		
Common or General.....	\$ 23.41	14.38
Flag Person.....	\$ 23.41	14.38
Landscape.....	\$ 15.00	
Skilled.....	\$ 23.41	14.38
Underground & Open Ditch (8 ft below grade).....	\$ 24.11	14.38
MILLWRIGHT.....	\$ 33.40	15.87
OPERATOR:		
GROUP 2.....	\$ 29.11	16.85
GROUP 3.....	\$ 28.66	16.85
GROUP 4.....	\$ 28.36	16.85
GROUP 5.....	\$ 25.79	16.85
GROUP 6.....	\$ 24.92	16.85
Speciality Equipment		
Articulated Hauler.....	\$ 28.36	16.85
Boom Truck.....	\$ 28.36	16.85
Landscaping Equipment.....	\$ 19.00	
Off-Road Truck.....	\$ 28.36	16.85



---

OPERATING ENGINEER CLASSIFICATIONS

GROUP 2: Helicopter Pilot; Concrete Pump; Cranes over 135 ft boom excluding jib; Dragline, Crawler, Hydraulic Backhoe and other similar equipment with shovel-type controls including attachments 3 cu yd & over; Grader or Motor Patrol; Pile Driving

GROUP 3: Asphalt Bituminous Stabilizer Plant; Cableway; Concrete Mixer, Stationary Plant; Derrick (guy or stiff leg) (power) (skids or stationary); Dragline, Crawler, Hydraulic Backhoe and other similar equipment with shovel-type controls including attachments up to 3 cu yd; Dredge or Engineers Dredge (Power); Front end loader 5 cu yd & over including attachments; Locomotive Crane Operator; Mixer (paving) concrete paving, Road Mole including Mucking operations, Conway or similar type; Mechanic, Welder; Tractor, Boom type. Tandem Scraper; Truck Crane, Crawler Crane; Tugboat 100 H.P. & over.

GROUP 4: Air Track Rock Drill; Automatic Road Machine CMI or similar; Backfiller; Concrete Batch Plant; Bituminous Roller Rubber Tire or Steel Drum 8 tons & over; Bituminous Spreader & Finishing Machine (power), including pavers, Macro Surfacing & Micro Surfacing or similar types (Operator & Screed person); Brokk or RTC remote control or similar type with attachments; Cat Challenger Tractor or similar types pulling Rock Wagons; Bulldozer & Scraper; Chip Harvester & Tree Cutter; Concrete Distributor & Spreader Finishing Machine, Longitudinal Float, Joint Machine, Spray Machine; Concrete Mixer on jobsite; Concrete Mixer; Crusing Plant (gravel, stone) or Gravel Washing, Crushing & Screening Plant; Curb Machine; Directional Boring Machine; Drill Rigs, Heavy Rotary or Churn or Cable Drill; Dual Tractor; Elevating Grader; Fork Lift; Front End, Skid Steer 1 to 5 cu yd; GPS Remote Operating of equipment; Hoist Engineer (power); Hydraulic Tree Planter; Launcher Person; Locomotive; Milling, Grinding, Planing, Fine Grade, or Trimmer Machine; Multiple Machines such as Air Compressors, Welding Machines, Generators, Pumps; Pavement Breaker or Tamping Machine, Mighty Mite or similar type; Pickup Sweeper 1 cu yd & over hopper capacity; Horizontal Boring Machine power actuated over 6 inches; Pugmill; Pumpcrete; Rubber Tired Farm Tractor with Backhoe attachment; Scraper; Self-Propelled Soil Stabilizer; Slip Form (power driven) paving; Tractor, Bulldozer; Wheel type Tractor over 50 hp with PTO; Trenching Machine excludes walk behind trencher; Tub Grinder, Morbark or similar type; Well Point installation or Dismantling.

GROUP 5: Air Compressor 600 cfm or over; Bituminous Roller under 8 tons; Concrete Saw multiple blade; Form Trench Digger (power); Front End Skid Steer up to 1 cu yd; Gunite Gunall; Hydraulic Log Splitter; Loader, Barber Greene or similar; Post Hole Driving Machine/Post Hole Auger; Power Actuated Auger & Boring Machine; Power Actuated Jack; Pump; Self-Propelled Chip Spreader (Flaherty or similar); Sheep Foot Compactor with blade 200 hp & over; Shouldering Machine (Power) APSCO or similar type including self-propelled Sand and Chip Spreader;



Stump Chipper and Tree Chipper; Tree Farmer (Machine).

GROUP 6: Cat, Challenger or siliar tractor when pulling Disk or Roller; Conveyor; Dredge Deck Hand; Fire Person or Tank Car Heater; Gravel Screening Plant (portable, not crushing or washing); Greaser (tractor); Lever Person; Oiler (Power Shovel, Truck Crane, Dragline, Crusher and Milling Mazchine; Power Sweeper; Sheep Foot Roller & Rollers on Gravel Compaction including vibrating rollers; Wheel type Tractor over 50 hp.

PAINTER (Including Pavement Marking).....\$ 26.29 13.11

PILEDRIVERMAN.....\$ 29.43 13.69

TRUCK DRIVER

GROUP 1.....\$ 16.50 3.50

GROUP 2.....\$ 23.73 6.40

GROUP 3.....\$ 23.40 6.40

GROUP 4.....\$ 25.89 8.21

TRUCK DRIVER CLASSIFICATIONS:

GROUP 1: Mechanic, Welder; Tractor Trailer; Truck hauling machinery including operation of hand and power operated winches.

GROUP 2: Four or more axle unit straight body truck.

GROUP 3: Bituminouos Distributor driver; Bituminous Distributor (one person operation); Three Axle units.

GROUP 4: Bituminous Distributor Spray operator (rear and oiler); Dump Person; Greaser; Pilot Car; Rubber Tire self-propelled Packer under 8 tons; Two Axle unit; Slurry Operator; Tank Truck Tender (gas, road oil, water); Tractor under 50 hp.

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR 5.5(a)(1)(ii)).

In the listing above, the "SU" designation means that rates listed under the identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have



been determined  
to be prevailing.

-----  
---

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7).  
Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the

interested  
party's position and by any information (wage payment data,  
project  
description, area practice material, etc.) that the requestor  
considers  
relevant to the issue.

3.) If the decision of the Administrator is not favorable, an  
interested  
party may appeal directly to the Administrative Review Board  
(formerly the  
Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION



**NOTICE TO BIDDERS (PROMPT PAYMENT TO SUBCONTRACTORS)**

Minnesota Statutes that require prompt payment to subcontractors:

471.425 Prompt payment of local government bills.

Subd. 1. Definitions. For the purposes of this section, the following terms have the meanings here given them.

(d) "Municipality" means any home rule charter or statutory city, county, town, school district, political subdivision or agency of local government. "Municipality" means the metropolitan council or any board or agency created under chapter 473.

Subd. 4a. Prompt payment to subcontractors.

Each contract of a municipality must require the prime contractor to pay any subcontractor within ten days of the prime contractor's receipt of payment from the municipality for undisputed services provided by the subcontractor. The contract must require the prime contractor to pay interest of 1-1/2 percent per month or any part of a month to the subcontractor on any undisputed amount not paid on time to the subcontractor. The minimum monthly interest penalty payment for an unpaid balance of \$100 or more is \$10. For an unpaid balance of less than \$100, the prime contractor shall pay the actual penalty due to the subcontractor. A subcontractor who prevails in a civil action to collect interest penalties from a prime contractor must be awarded its costs and disbursements, including attorney's fees, incurred in bringing the action.

HIST: 1985 c 136 s 5; 1995 c 31 s 1



Department of Public Works  
201 4<sup>th</sup> Street SE, Room 108  
Rochester, MN 55904-3740  
(507) 328-2400

---

**PREVAILING WAGES FOR STATE FUNDED CONSTRUCTION**

**MINNESOTA DEPARTMENT OF LABOR AND INDUSTRY PREVAILING WAGES FOR STATE FUNDED  
CONSTRUCTION PROJECTS**



**THIS NOTICE MUST BE POSTED ON THE JOBSITE IN A CONSPICUOUS PLACE**

---

**Construction Type: Highway and Heavy**

**Region Number: 06**

Counties within region:

- DODGE-20
- FILLMORE-23
- FREEBORN-24
- GOODHUE-25
- HOUSTON-28
- MOWER-50
- OLMSTED-55
- RICE-66
- STEELE-74
- WABASHA-79
- WINONA-85

Effective: 2010-11-29    Revised: 2011-01-10

This project is covered by Minnesota prevailing wage statutes. Wage rates listed below are the minimum hourly rates to be paid on this project.

All hours worked in excess of eight (8) hours per day or forty (40) hours per week shall be paid at a rate of one and one half (1 1/2) times the basic hourly rate.

Violations should be reported to:

Department of Transportation  
Office of Construction  
Transportation Building MS650  
John Ireland Blvd  
St. Paul, MN 55155  
(651) 366-4209

Refer questions concerning the prevailing wage rates to:

Department of Labor and Industry  
Prevailing Wage Section  
443 Lafayette Road N  
St Paul, MN 55155  
(651) 284-5091  
[DLI.PrevWage@state.mn.us](mailto:DLI.PrevWage@state.mn.us)

LABOR CODE AND CLASS	EFFECT DATE	BASIC RATE	FRINGE RATE	TOTAL RATE
101 LABORER, COMMON (GENERAL LABOR WORK)	2010-11-29	23.16	13.63	36.79
	2011-05-01	23.41	14.38	37.79
102 LABORER, SKILLED (ASSISTING SKILLED CRAFT JOURNEYMAN)	2010-11-29	23.16	13.63	36.79
	2011-05-01	23.41	14.38	37.79
103 LABORER, LANDSCAPING (GARDENER, SOD LAYER AND NURSERY OPERATOR)	2010-11-29	15.00	0.00	15.00
104 FLAG PERSON	2010-11-29	23.16	13.63	36.79
	2011-05-01	23.41	14.38	37.79
105 WATCH PERSON	FOR RATE CALL 651-284-5091 OR EMAIL <a href="mailto:DLI.PREVVAGE@STATE.MN.US">DLI.PREVVAGE@STATE.MN.US</a>			
106 BLASTER	FOR RATE CALL 651-284-5091 OR EMAIL <a href="mailto:DLI.PREVVAGE@STATE.MN.US">DLI.PREVVAGE@STATE.MN.US</a>			
107 PIPELAYER (WATER, SEWER AND GAS)	2010-11-29	25.16	13.63	38.79
	2011-05-01	25.41	14.38	39.79
108 TUNNEL MINER	FOR RATE CALL 651-284-5091 OR EMAIL <a href="mailto:DLI.PREVVAGE@STATE.MN.US">DLI.PREVVAGE@STATE.MN.US</a>			
109 UNDERGROUND AND OPEN DITCH LABORER (EIGHT FEET BELOW STARTING GRADE LEVEL)	2010-11-29	23.86	13.63	37.49
	2011-05-01	24.11	14.38	38.49
110 SURVEY FIELD TECHNICIAN (OPERATE TOTAL STATION, GPS RECEIVER, LEVEL, ROD OR RANGE POLES, STEEL TAPE MEASUREMENT; MARK AND DRIVE STAKES; HAND OR POWER DIGGING FOR AND IDENTIFICATION OF MARKERS OR MONUMENTS; PERFORM AND CHECK CALCULATIONS; REVIEW AND UNDERSTAND CONSTRUCTION PLANS AND LAND SURVEY MATERIALS). THIS CLASSIFICATION DOES NOT APPLY TO THE WORK PERFORMED ON A PREVAILING WAGE PROJECT BY A LAND SURVEYOR WHO IS LICENSED	2010-11-29	26.00	12.70	38.70



PURSUANT TO MINNESOTA STATUTES, SECTIONS 326.02 TO  
326.15.

111 TRAFFIC CONTROL PERSON (TEMPORARY SIGNAGE)

FOR RATE CALL 651-284-5091 OR EMAIL  
[DLI.PREWWAGE@STATE.MN.US](mailto:DLI.PREWWAGE@STATE.MN.US)

112 QUALITY CONTROL TESTER (FIELD AND COVERED OFF-SITE FACILITIES; TESTING OF AGGREGATE, ASPHALT, AND CONCRETE MATERIALS); LIMITED TO MN DOT HIGHWAY AND HEAVY CONSTRUCTION PROJECTS WHERE THE MN DOT HAS RETAINED QUALITY ASSURANCE PROFESSIONALS TO REVIEW AND INTERPRET THE RESULTS OF QUALITY CONTROL TESTERS. SERVICES PROVIDED BY THE CONTRACTOR.	2010-11-29	15.80	4.03	19.83
---	------------	-------	------	-------

201 ARTICULATED HAULER	2010-11-29	28.36	15.85	44.21
	2011-05-01	28.36	16.85	45.21

202 BOOM TRUCK	2010-11-29	28.36	15.85	44.21
	2011-05-01	28.36	16.85	45.21

203 LANDSCAPING EQUIPMENT, INCLUDES HYDRO SEEDER OR MULCHER, SOD ROLLER, FARM TRACTOR WITH ATTACHMENT SPECIFICALLY SEEDING, SODDING, OR PLANT, AND TWO-FRAMED FORKLIFT (EXCLUDING FRONT, POSIT-TRACK, AND SKID STEER LOADERS), NO EARTHWORK OR GRADING FOR ELEVATIONS	2010-11-29	19.00	0.00	19.00
---	------------	-------	------	-------

204 OFF-ROAD TRUCK	2010-11-29	28.36	15.85	44.21
	2011-05-01	28.36	16.85	45.21

GROUP 2	2010-11-29	29.11	15.85	44.96
	2011-05-01	29.11	16.85	45.96

302 HELICOPTER PILOT (HIGHWAY AND HEAVY ONLY)

303 CONCRETE PUMP (HIGHWAY AND HEAVY ONLY)

304 ALL CRANES WITH OVER 135-FOOT BOOM, EXCLUDING JIB (HIGHWAY AND HEAVY ONLY)

305 DRAGLINE, CRAWLER, HYDRAULIC BACKHOE (TRACK OR WHEEL MOUNTED) AND/OR OTHER SIMILAR EQUIPMENT WITH SHOVEL-TYPE CONTROLS THREE CUBIC YARDS AND OVER MANUFACTURER.S RATED CAPACITY INCLUDING ALL ATTACHMENTS. (HIGHWAY AND HEAVY ONLY)



306 GRADER OR MOTOR PATROL (HIGHWAY AND HEAVY ONLY)

307 PILE DRIVING (HIGHWAY AND HEAVY ONLY)

308 TUGBOAT 100 H.P. AND OVER WHEN LICENSE REQUIRED (HIGHWAY AND HEAVY ONLY)

GROUP 3	2010-11-29	28.66	15.85	44.51
	2011-05-01	28.66	16.85	45.51

309 ASPHALT BITUMINOUS STABILIZER PLANT (HIGHWAY AND HEAVY ONLY)

310 CABLEWAY (HIGHWAY AND HEAVY ONLY)

311 CONCRETE MIXER, STATIONARY PLANT (HIGHWAY AND HEAVY ONLY)

312 DERRICK (GUY OR STIFFLEG)(POWER)(SKIDS OR STATIONARY) (HIGHWAY AND HEAVY ONLY)

313 DRAGLINE, CRAWLER, HYDRAULIC BACKHOE (TRACK OR WHEEL MOUNTED) AND/OR SIMILAR EQUIPMENT WITH SHOVEL-TYPE CONTROLS, UP TO THREE CUBIC YARDS MANUFACTURER'S RATED CAPACITY INCLUDING ALL ATTACHMENTS (HIGHWAY AND HEAVY ONLY)

314 DREDGE OR ENGINEERS, DREDGE (POWER) AND ENGINEER (HIGHWAY AND HEAVY ONLY)

315 FRONT END LOADER, FIVE CUBIC YARDS AND OVER INCLUDING ATTACHMENTS. (HIGHWAY AND HEAVY ONLY)

316 LOCOMOTIVE CRANE OPERATOR (HIGHWAY AND HEAVY ONLY)

317 MIXER (PAVING) CONCRETE PAVING, ROAD MOLE, INCLUDING MUCKING OPERATIONS, CONWAY OR SIMILAR TYPE (HIGHWAY AND HEAVY ONLY)

318 MECHANIC . WELDER ON POWER EQUIPMENT (HIGHWAY AND HEAVY ONLY)

319 TRACTOR . BOOM TYPE (HIGHWAY AND HEAVY ONLY)

320 TANDEM SCRAPER (HIGHWAY AND HEAVY ONLY)

321 TRUCK CRANE . CRAWLER CRANE (HIGHWAY AND HEAVY ONLY)

322 TUGBOAT 100 H.P AND OVER (HIGHWAY AND HEAVY ONLY)

GROUP 4	2010-11-29	28.36	15.85	44.21
	2011-05-01	28.36	16.85	45.21

323 AIR TRACK ROCK DRILL (HIGHWAY AND HEAVY ONLY)

324 AUTOMATIC ROAD MACHINE (CMI OR SIMILAR) (HIGHWAY AND HEAVY ONLY)

325 BACKFILLER OPERATOR (HIGHWAY AND HEAVY ONLY)

326 CONCRETE BATCH PLANT OPERATOR (HIGHWAY AND HEAVY ONLY)

327 BITUMINOUS ROLLERS, RUBBER TIRED OR STEEL DRUMMED (EIGHT TONS AND OVER) (HIGHWAY AND HEAVY ONLY)

328 BITUMINOUS SPREADER AND FINISHING MACHINES (POWER), INCLUDING PAVERS, MACRO SURFACING AND MICRO SURFACING, OR SIMILAR TYPES (OPERATOR AND SCREED PERSON) (HIGHWAY AND HEAVY ONLY)

329 BROKK OR R.T.C. REMOTE CONTROL OR SIMILAR TYPE WITH ALL ATTACHMENTS (HIGHWAY AND HEAVY ONLY)

330 CAT CHALLENGER TRACTORS OR SIMILAR TYPES PULLING ROCK WAGONS, BULLDOZERS AND SCRAPERS (HIGHWAY AND



HEAVY ONLY)

- 331 CHIP HARVESTER AND TREE CUTTER (HIGHWAY AND HEAVY ONLY)
- 332 CONCRETE DISTRIBUTOR AND SPREADER FINISHING MACHINE, LONGITUDINAL FLOAT, JOINT MACHINE, AND SPRAY MACHINE (HIGHWAY AND HEAVY ONLY)
- 333 CONCRETE MIXER ON JOBSITE (HIGHWAY AND HEAVY ONLY)
- 334 CONCRETE MOBIL (HIGHWAY AND HEAVY ONLY)
- 335 CRUSHING PLANT (GRAVEL AND STONE) OR GRAVEL WASHING, CRUSHING AND SCREENING PLANT (HIGHWAY AND HEAVY ONLY)
- 336 CURB MACHINE (HIGHWAY AND HEAVY ONLY)
- 337 DIRECTIONAL BORING MACHINE (HIGHWAY AND HEAVY ONLY)
- 338 DOPE MACHINE (PIPELINE) (HIGHWAY AND HEAVY ONLY)
- 339 DRILL RIGS, HEAVY ROTARY OR CHURN OR CABLE DRILL (HIGHWAY AND HEAVY ONLY)
- 340 DUAL TRACTOR (HIGHWAY AND HEAVY ONLY)
- 341 ELEVATING GRADER (HIGHWAY AND HEAVY ONLY)
- 342 FORK LIFT OR STRADDLE CARRIER (HIGHWAY AND HEAVY ONLY)
- 343 FORK LIFT OR LUMBER STACKER (HIGHWAY AND HEAVY ONLY)
- 344 FRONT END, SKID STEER OVER 1 TO 5 C YD
- 345 GPS REMOTE OPERATING OF EQUIPMENT (HIGHWAY AND HEAVY ONLY)
- 346 HOIST ENGINEER (POWER) (HIGHWAY AND HEAVY ONLY)
- 347 HYDRAULIC TREE PLANTER (HIGHWAY AND HEAVY ONLY)
- 348 LAUNCHER PERSON (TANKER PERSON OR PILOT LICENSE) (HIGHWAY AND HEAVY ONLY)
- 349 LOCOMOTIVE (HIGHWAY AND HEAVY ONLY)
- 350 MILLING, GRINDING, PLANNING, FINE GRADE, OR TRIMMER MACHINE (HIGHWAY AND HEAVY ONLY)
- 351 MULTIPLE MACHINES, SUCH AS AIR COMPRESSORS, WELDING MACHINES, GENERATORS, PUMPS (HIGHWAY AND HEAVY ONLY)
- 352 PAVEMENT BREAKER OR TAMPING MACHINE (POWER DRIVEN) MIGHTY MITE OR SIMILAR TYPE (HIGHWAY AND HEAVY ONLY)
- 353 PICKUP SWEEPER, ONE CUBIC YARD AND OVER HOPPER CAPACITY(HIGHWAY AND HEAVY ONLY)
- 354 PIPELINE WRAPPING, CLEANING OR BENDING MACHINE (HIGHWAY AND HEAVY ONLY)
- 355 POWER PLANT ENGINEER, 100 KWH AND OVER (HIGHWAY AND HEAVY ONLY)
- 356 POWER ACTUATED HORIZONTAL BORING MACHINE, OVER SIX INCHES (HIGHWAY AND HEAVY ONLY)
- 357 PUGMILL (HIGHWAY AND HEAVY ONLY)
- 358 PUMPCRETE (HIGHWAY AND HEAVY ONLY)
- 359 RUBBER-TIRED FARM TRACTOR WITH BACKHOE INCLUDING ATTACHMENTS (HIGHWAY AND HEAVY ONLY)
- 360 SCRAPER (HIGHWAY AND HEAVY ONLY)

- 361 SELF-PROPELLED SOIL STABILIZER (HIGHWAY AND HEAVY ONLY)
- 362 SLIP FORM (POWER DRIVEN) (PAVING) (HIGHWAY AND HEAVY ONLY)
- 363 TIE TAMPER AND BALLAST MACHINE (HIGHWAY AND HEAVY ONLY)
- 364 TRACTOR, BULLDOZER (HIGHWAY AND HEAVY ONLY)
- 365 TRACTOR, WHEEL TYPE, OVER 50 H.P. WITH PTO UNRELATED TO LANDSCAPING (HIGHWAY AND HEAVY ONLY)
- 366 TRENCHING MACHINE (SEWER, WATER, GAS) EXCLUDES WALK BEHIND TRENCHER (HIGHWAY AND HEAVY ONLY)
- 367 TUB GRINDER, MORBARK, OR SIMILAR TYPE (HIGHWAY AND HEAVY ONLY)
- 368 WELL POINT DISMANTLING OR INSTALLATION (HIGHWAY AND HEAVY ONLY)

GROUP 5	2010-11-29	25.79	15.85	41.64
	2011-05-01	25.79	16.85	42.64

- 369 AIR COMPRESSOR, 600 CFM OR OVER (HIGHWAY AND HEAVY ONLY)
- 370 BITUMINOUS ROLLER (UNDER EIGHT TONS) (HIGHWAY AND HEAVY ONLY)
- 371 CONCRETE SAW (MULTIPLE BLADE) (POWER OPERATED) (HIGHWAY AND HEAVY ONLY)
- 372 FORM TRENCH DIGGER (POWER) (HIGHWAY AND HEAVY ONLY)
- 373 FRONT END, SKID STEER UP TO 1C YD
- 374 GUNITE GUNALL (HIGHWAY AND HEAVY ONLY)
- 375 HYDRAULIC LOG SPLITTER (HIGHWAY AND HEAVY ONLY)
- 376 LOADER (BARBER GREENE OR SIMILAR TYPE) (HIGHWAY AND HEAVY ONLY)
- 377 POST HOLE DRIVING MACHINE/POST HOLE AUGER (HIGHWAY AND HEAVY ONLY)
- 378 POWER ACTUATED AUGER AND BORING MACHINE (HIGHWAY AND HEAVY ONLY)
- 379 POWER ACTUATED JACK (HIGHWAY AND HEAVY ONLY)
- 380 PUMP (HIGHWAY AND HEAVY ONLY)
- 381 SELF-PROPELLED CHIP SPREADER (FLAHERTY OR SIMILAR) (HIGHWAY AND HEAVY ONLY)
- 382 SHEEP FOOT COMPACTOR WITH BLADE . 200 H.P. AND OVER(HIGHWAY AND HEAVY ONLY)
- 383 SHOULDERING MACHINE (POWER) APSCO OR SIMILAR TYPE INCLUDING SELF-PROPELLED SAND AND CHIP SPREADER (HIGHWAY AND HEAVY ONLY)
- 384 STUMP CHIPPER AND TREE CHIPPER (HIGHWAY AND HEAVY ONLY)
- 385 TREE FARMER (MACHINE) (HIGHWAY AND HEAVY ONLY)

GROUP 6	2010-11-29	24.92	15.85	40.77
	2011-05-01	24.92	16.85	41.77

- 387 CAT, CHALLENGER, OR SIMILAR TYPE OF TRACTORS, WHEN PULLING DISK OR ROLLER (HIGHWAY AND HEAVY ONLY)



- 388 CONVEYOR (HIGHWAY AND HEAVY ONLY)
- 389 DREDGE DECK HAND (HIGHWAY AND HEAVY ONLY)
- 390 FIRE PERSON OR TANK CAR HEATER (HIGHWAY AND HEAVY ONLY)
- 391 GRAVEL SCREENING PLANT (PORTABLE NOT CRUSHING OR WASHING) (HIGHWAY AND HEAVY ONLY)
- 392 GREASER (TRACTOR) (HIGHWAY AND HEAVY ONLY)
- 393 LEVER PERSON (HIGHWAY AND HEAVY ONLY)
- 394 OILER (POWER SHOVEL, CRANE, TRUCK CRANE, DRAGLINE, CRUSHERS, AND MILLING MACHINES, OR OTHER SIMILAR HEAVY EQUIPMENT) (HIGHWAY AND HEAVY ONLY)
- 395 POWER SWEEPER (HIGHWAY AND HEAVY ONLY)
- 396 SHEEP FOOT ROLLER AND ROLLERS ON GRAVEL COMPACTION, INCLUDING VIBRATING ROLLERS (HIGHWAY AND HEAVY ONLY)
- 397 TRACTOR, WHEEL TYPE, OVER 50 H.P., UNRELATED TO LANDSCAPING

**GROUP 1**

FOR RATE CALL 651-284-5091 OR EMAIL  
[DLI.PREVVAGE@STATE.MN.US](mailto:DLI.PREVVAGE@STATE.MN.US)

- 501 HELICOPTER PILOT (COMMERCIAL CONSTRUCTION ONLY)
- 502 TOWER CRANE 250 FEET AND OVER (COMMERCIAL CONSTRUCTION ONLY)
- 503 TRUCK CRAWLER CRANE WITH 200 FEET OF BOOM AND OVER, INCLUDING JIB (COMMERCIAL CONSTRUCTION ONLY)

**GROUP 2**

FOR RATE CALL 651-284-5091 OR EMAIL  
[DLI.PREVVAGE@STATE.MN.US](mailto:DLI.PREVVAGE@STATE.MN.US)

- 504 CONCRETE PUMP WITH 50 METERS/164 FEET OF BOOM AND OVER (COMMERCIAL CONSTRUCTION ONLY)
- 505 PILE DRIVING WHEN THREE DRUMS IN USE (COMMERCIAL CONSTRUCTION ONLY)
- 506 TOWER CRANE 200 FEET AND OVER (COMMERCIAL CONSTRUCTION ONLY)
- 507 TRUCK OR CRAWLER CRANE WITH 150 FEET OF BOOM UP TO AND NOT INCLUDING 200 FEET, INCLUDING JIB (COMMERCIAL CONSTRUCTION ONLY)

**GROUP 3**

FOR RATE CALL 651-284-5091 OR EMAIL  
[DLI.PREVVAGE@STATE.MN.US](mailto:DLI.PREVVAGE@STATE.MN.US)

- 508 ALL-TERRAIN VEHICLE CRANES (COMMERCIAL CONSTRUCTION ONLY)
- 509 CONCRETE PUMP 32-49 METERS/102-164 FEET (COMMERCIAL CONSTRUCTION ONLY)
- 510 DERRICK (GUY & STIFFLEG) (COMMERCIAL CONSTRUCTION ONLY)
- 511 STATIONARY TOWER CRANE 200 FEET AND OVER MEASURED FROM BOOM FOOT PIN (COMMERCIAL CONSTRUCTION ONLY)
- 512 SELF-ERECTING TOWER CRANE 100 FEET AND OVER MEASURED FROM BOOM FOOT PIN (COMMERCIAL CONSTRUCTION ONLY)
- 513 TRAVELING TOWER CRANE (COMMERCIAL CONSTRUCTION ONLY)

514 TRUCK OR CRAWLER CRANE UP TO AND NOT INCLUDING 150 FEET OF BOOM, INCLUDING JIB (COMMERCIAL CONSTRUCTION ONLY)

**GROUP 4**

FOR RATE CALL 651-284-5091 OR EMAIL  
[DLI.PREVVAGE@STATE.MN.US](mailto:DLI.PREVVAGE@STATE.MN.US)

515 CRAWLER BACKHOE INCLUDING ATTACHMENTS (COMMERCIAL CONSTRUCTION ONLY)

516 FIREPERSON, CHIEF BOILER LICENSE (COMMERCIAL CONSTRUCTION ONLY)

517 HOIST ENGINEER (THREE DRUMS OR MORE) (COMMERCIAL CONSTRUCTION ONLY)

518 LOCOMOTIVE (COMMERCIAL CONSTRUCTION ONLY)

519 OVERHEAD CRANE ( INSIDE BUILDING PERIMETER) (COMMERCIAL CONSTRUCTION ONLY)

520 TRACTOR . BOOM TYPE (COMMERCIAL CONSTRUCTION ONLY)

**GROUP 5**

FOR RATE CALL 651-284-5091 OR EMAIL  
[DLI.PREVVAGE@STATE.MN.US](mailto:DLI.PREVVAGE@STATE.MN.US)

521 AIR COMPRESSOR 450 CFM OR OVER (TWO OR MORE MACHINES) (COMMERCIAL CONSTRUCTION ONLY)

522 CONCRETE MIXER (COMMERCIAL CONSTRUCTION ONLY)

523 CONCRETE PUMP UP TO 31 METERS/101 FEET OF BOOM

524 DRILL RIGS, HEAVY ROTARY OR CHURN OR CABLE DRILL WHEN USED FOR CAISSON FOR ELEVATOR OR BUILDING CONSTRUCTION (COMMERCIAL CONSTRUCTION ONLY)

525 FORKLIFT (COMMERCIAL CONSTRUCTION ONLY)

526 FRONT END, SKID STEER 1 TO 5 C YD

527 HOIST ENGINEER ( ONE OR TWO DRUMS) (COMMERCIAL CONSTRUCTION ONLY)

528 MECHANIC-WELDER (ON POWER EQUIPMENT) (COMMERCIAL CONSTRUCTION ONLY)

529 POWER PLANT (100 KW AND OVER OR MULTIPLES EQUAL TO 100KW AND OVER) (COMMERCIAL CONSTRUCTION ONLY)

530 PUMP OPERATOR AND/OR CONVEYOR (TWO OR MORE MACHINES) (COMMERCIAL CONSTRUCTION ONLY)

531 SELF-ERECTING TOWER CRANE UNDER 100 FEET MEASURED FROM BOOM FOOT PIN (COMMERCIAL CONSTRUCTION ONLY)

532 STRADDLE CARRIER (COMMERCIAL CONSTRUCTION ONLY)

533 TRACTOR OVER D2 (COMMERCIAL CONSTRUCTION ONLY)

534 WELL POINT PUMP (COMMERCIAL CONSTRUCTION ONLY)

**GROUP 6**

FOR RATE CALL 651-284-5091 OR EMAIL  
[DLI.PREVVAGE@STATE.MN.US](mailto:DLI.PREVVAGE@STATE.MN.US)

535 CONCRETE BATCH PLANT (COMMERCIAL CONSTRUCTION ONLY)

536 FIREPERSON, FIRST CLASS BOILER LICENSE (COMMERCIAL CONSTRUCTION ONLY)

537 FRONT END, SKID STEER UP TO 1 C YD



538 GUNITE MACHINE (COMMERCIAL CONSTRUCTION ONLY)

539 TRACTOR OPERATOR D2 OR SIMILAR SIZE (COMMERCIAL CONSTRUCTION ONLY)

540 TRENCHING MACHINE (SEWER, WATER, GAS) EXCLUDES WALK BEHIND TRENCHER

**GROUP 7**

FOR RATE CALL 651-284-5091 OR EMAIL  
[DLI.PREVMWAGE@STATE.MN.US](mailto:DLI.PREVMWAGE@STATE.MN.US)

541 AIR COMPRESSOR 600 CFM OR OVER (COMMERCIAL CONSTRUCTION ONLY)

542 BRAKEPERSON (COMMERCIAL CONSTRUCTION ONLY)

543 CONCRETE PUMP/PUMPCRETE OR COMPLACO TYPE (COMMERCIAL CONSTRUCTION ONLY)

544 FIREPERSON, TEMPORARY HEAT SECOND CLASS BOILER LICENSE (COMMERCIAL CONSTRUCTION ONLY)

545 OILER (POWER SHOVEL, CRANE, TRUCK CRANE, DRAGLINE, CRUSHERS AND MILLING MACHINES, OR OTHER SIMILAR POWER EQUIPMENT) (COMMERCIAL CONSTRUCTION ONLY)

546 PICK UP SWEEPER (ONE CUBIC YARD HOPPER CAPACITY) (COMMERCIAL CONSTRUCTION ONLY)

547 PUMP AND/OR CONVEYOR (COMMERCIAL CONSTRUCTION ONLY)

**GROUP 8**

FOR RATE CALL 651-284-5091 OR EMAIL  
[DLI.PREVMWAGE@STATE.MN.US](mailto:DLI.PREVMWAGE@STATE.MN.US)

548 ELEVATOR OPERATOR (COMMERCIAL CONSTRUCTION ONLY)

549 GREASER (COMMERCIAL CONSTRUCTION ONLY)

550 MECHANICAL SPACE HEATER (TEMPORARY HEAT NO BOILER LICENSE REQUIRED) (COMMERCIAL CONSTRUCTION ONLY)

**GROUP 1**

2010-11-29 16.50 3.50 20.00

601 MECHANIC . WELDER

602 TRACTOR TRAILER DRIVER

603 TRUCK DRIVER (HAULING MACHINERY INCLUDING OPERATION OF HAND AND POWER OPERATED WINCHES)

**GROUP 2**

2010-11-29 23.73 6.40 30.13

604 FOUR OR MORE AXLE UNIT, STRAIGHT BODY TRUCK

**GROUP 3**

2010-11-29 23.40 6.40 29.80

605 BITUMINOUS DISTRIBUTOR DRIVER

606 BITUMINOUS DISTRIBUTOR (ONE PERSON OPERATION)

607 THREE AXLE UNITS

GROUP 4	2010-11-29	25.89	8.21	34.10
608 BITUMINOUS DISTRIBUTOR SPRAY OPERATOR (REAR AND OILER)				
609 DUMP PERSON				
610 GREASER				
611 PILOT CAR DRIVER				
612 RUBBER-TIRED, SELF-PROPELLED PACKER UNDER 8 TONS				
613 TWO AXLE UNIT				
614 SLURRY OPERATOR				
615 TANK TRUCK HELPER (GAS, OIL, ROAD OIL, AND WATER)				
616 TRACTOR OPERATOR, UNDER 50 H.P.				
701 HEATING AND FROST INSULATORS	2010-11-29	20.75	4.45	25.20
702 BOILERMAKERS	FOR RATE CALL 651-284-5091 OR EMAIL <a href="mailto:DLI.PREVVAGE@STATE.MN.US">DLI.PREVVAGE@STATE.MN.US</a>			
703 BRICKLAYERS	FOR RATE CALL 651-284-5091 OR EMAIL <a href="mailto:DLI.PREVVAGE@STATE.MN.US">DLI.PREVVAGE@STATE.MN.US</a>			
704 CARPENTERS	2010-11-29	29.43	13.69	43.12
705 CARPET LAYERS (LINOLEUM)	FOR RATE CALL 651-284-5091 OR EMAIL <a href="mailto:DLI.PREVVAGE@STATE.MN.US">DLI.PREVVAGE@STATE.MN.US</a>			
706 CEMENT MASONS	2010-11-29	34.36	7.90	42.26
707 ELECTRICIANS	2010-11-29	31.08	15.15	46.23
708 ELEVATOR CONSTRUCTORS	FOR RATE CALL 651-284-5091 OR EMAIL <a href="mailto:DLI.PREVVAGE@STATE.MN.US">DLI.PREVVAGE@STATE.MN.US</a>			
709 GLAZIERS	FOR RATE CALL 651-284-5091 OR EMAIL <a href="mailto:DLI.PREVVAGE@STATE.MN.US">DLI.PREVVAGE@STATE.MN.US</a>			
710 LATHERS	FOR RATE CALL 651-284-5091 OR EMAIL <a href="mailto:DLI.PREVVAGE@STATE.MN.US">DLI.PREVVAGE@STATE.MN.US</a>			



---

711 GROUND PERSON	2010-11-29	17.61	9.06	26.67
712 IRONWORKERS	2010-11-29	33.80	20.37	54.17
	2011-05-01	34.10	20.37	54.47
713 LINEMAN	2010-11-29	35.34	15.19	50.53
	2011-05-01	36.04	15.64	51.68
714 MILLWRIGHT	2010-11-29	33.40	15.87	49.27
715 PAINTERS (INCLUDING HAND BRUSHED, HAND SPRAYED, AND THE TAPING OF PAVEMENT MARKINGS)	2010-11-29	26.29	13.11	39.40
	2010-12-01	26.29	13.21	39.50
716 PILEDRIVER (INCLUDING VIBRATORY DRIVER OR EXTRACTOR FOR PILING AND SHEETING OPERATIONS)	2010-11-29	29.43	13.69	43.12
717 PIPEFITTERS . STEAMFITTERS	2010-11-29	34.20	27.08	61.28
718 PLASTERERS	FOR RATE CALL 651-284-5091 OR EMAIL <a href="mailto:DLI.PREVVAGE@STATE.MN.US">DLI.PREVVAGE@STATE.MN.US</a>			
719 PLUMBERS	2010-11-29	34.21	16.55	50.76
720 ROOFER	FOR RATE CALL 651-284-5091 OR EMAIL <a href="mailto:DLI.PREVVAGE@STATE.MN.US">DLI.PREVVAGE@STATE.MN.US</a>			
721 SHEET METAL WORKERS	2010-11-29	35.08	1.89	36.97
722 SPRINKLER FITTERS	FOR RATE CALL 651-284-5091 OR EMAIL <a href="mailto:DLI.PREVVAGE@STATE.MN.US">DLI.PREVVAGE@STATE.MN.US</a>			
723 TERRAZZO WORKERS	FOR RATE CALL 651-284-5091 OR EMAIL <a href="mailto:DLI.PREVVAGE@STATE.MN.US">DLI.PREVVAGE@STATE.MN.US</a>			

---



724 TILE SETTERS	FOR RATE CALL 651-284-5091 OR EMAIL <a href="mailto:DLI.PRE VWAGE@STATE.MN.US">DLI.PRE VWAGE@STATE.MN.US</a>
725 TILE FINISHERS	FOR RATE CALL 651-284-5091 OR EMAIL <a href="mailto:DLI.PRE VWAGE@STATE.MN.US">DLI.PRE VWAGE@STATE.MN.US</a>
726 DRYWALL TAPER	FOR RATE CALL 651-284-5091 OR EMAIL <a href="mailto:DLI.PRE VWAGE@STATE.MN.US">DLI.PRE VWAGE@STATE.MN.US</a>
727 WIRING SYSTEM TECHNICIAN	FOR RATE CALL 651-284-5091 OR EMAIL <a href="mailto:DLI.PRE VWAGE@STATE.MN.US">DLI.PRE VWAGE@STATE.MN.US</a>
728 WIRING SYSTEMS INSTALLER	FOR RATE CALL 651-284-5091 OR EMAIL <a href="mailto:DLI.PRE VWAGE@STATE.MN.US">DLI.PRE VWAGE@STATE.MN.US</a>
729 ASBESTOS ABATEMENT WORKER	FOR RATE CALL 651-284-5091 OR EMAIL <a href="mailto:DLI.PRE VWAGE@STATE.MN.US">DLI.PRE VWAGE@STATE.MN.US</a>
730 SIGN ERECTOR	FOR RATE CALL 651-284-5091 OR EMAIL <a href="mailto:DLI.PRE VWAGE@STATE.MN.US">DLI.PRE VWAGE@STATE.MN.US</a>



DEPARTMENT OF LABOR AND INDUSTRY  
LABOR STANDARDS UNIT

April 4, 2011

**NOTICE OF CERTIFICATION OF TRUCK RENTAL RATES**

**NOTICE OF CERTIFICATION OF TRUCK RENTAL RATES AND EFFECTIVE DATE PURSUANT TO MINNESOTA RULES, PART 5200.1105**

On April 4, 2011, the Commissioner of the Department of Labor and Industry ("DLI") certified the minimum truck rental rates for highway projects in the state's ten highway and heavy construction areas for trucks and drivers operating "five or more axle units, straight body trucks," "four axle units, straight body trucks," "three axle units," "tractor only" and "tractor trailers." The certification followed publication of the Notice of Determination of Truck Rental Rates in the *State Register* on February 7, 2011 and the informal conference held pursuant to Minnesota Rules, part 5200.1105 on March 1, 2011.

According to Minnesota Rules, part 5200.1105, the purpose of the informal conference is for DLI to obtain further input regarding the proposed rates before the rates are certified. Approximately 50 individuals attended the informal conference. Many of the attendees voiced strong concerns regarding the inadequacy of the proposed rates. Among the concerns raised was the fact that the proposed rates were based on 2009 costs, including the 2009 price of fuel. Speakers indicated that because of the dramatic increase in the price of diesel in recent months, the published rates were far below the operators' current costs. As stated by one attendee:

I might not even be able to survive until next year. If I have a bad season, there's no room left, you know. The price of oil and the price of fuel is going to kill all of us guys this summer.

Testimony of Mike McDonald, Transcript of Informal Conference, p. 63.

Following the informal conference, DLI staff obtained data from the United States Department of Energy ("DOE") regarding the price of diesel during 2009 as compared to current costs. That data, available at [www.eia.doe.gov](http://www.eia.doe.gov), show that the average price of diesel during 2009 was \$2.463 per gallon. The average price of diesel during January and February 2011 was \$3.497 per gallon. Consequently, the average price of diesel for the first two months of this year was 41.9% higher than the average cost of diesel during 2009.

The purpose of Minnesota Rules, part 5200.1105, as stated in its Statement of Need and Reasonableness, is to "provide equitable compensation" to independent truck operators. The commissioner finds that in order to carry out the purpose of the rule, it is appropriate to consider the concerns expressed at the informal conference and to use average 2011 diesel costs in computing and certifying 2011 truck rental rates. Specifically, the commissioner finds that the extreme disparity between 2009 and current.

<sup>1</sup> The DLI has historically used input from the informal conferences to establish certified rates. For example, truck rental rates certified in 2009 varied from the proposed rates based on information gathered at the informal conference.

fuel costs warrants this adjustment in order for truck operators to be equitably compensated.<sup>2</sup>

Construction truck operating costs were initially determined by survey on a statewide basis and were the subject of further input by interested parties attending the informal conference pursuant to Minnesota Rules, part 5200.1105 on March 1, 2011 and further data on fuel prices from the DOE for 2009 and 2011. In light of the discussion above, fuel costs stated in the surveys were adjusted upward by 41.9% to determine statewide operating costs. As a result of this adjustment, the operating cost for "five or more axle units, straight body trucks" is determined to be \$49.10 per hour; the operating cost for "four axle units, straight body trucks" is determined to be \$45.49 per hour; the operating cost for "three axle units" is determined to be \$37.35 per hour; the operating cost for "tractor only" is determined to be \$46.02 per hour; and the operating cost for "tractor trailers" is determined to be \$57.48 per hour.

Adding the prevailing wage for drivers of these five types of trucks from each of the State's ten highway and heavy construction areas to the operating costs, the minimum hourly truck rental rate for the five types of trucks in each area is certified to be as follows:

	Tractor trailer	Five or more axle	Four axle	Three axle	Tractor only
<b>Region 1</b>	97.23	74.04	70.43	76.45	85.77
<b>Region 2</b>	90.9	82.01	78.4	67.41	79.44
<b>Region 3</b>	90.9	73.06	69.45	70.11	79.44
<b>Region 4</b>	81.03	72.65	69.04	70.11	69.57
<b>Region 5</b>	94.43	76.46	72.85	66.75	82.91
<b>Region 6</b>	77.48	79.23	75.62	67.15	66.02
<b>Region 7</b>	83.33	86.5	82.89	74.65	71.87
<b>Region 8</b>	84.99	76.46	72.85	70.11	73.53
<b>Region 9</b>	97.63	76.46	72.85	76.85	86.17
<b>Region 10</b>	90.9	82.01	78.4	70.11	79.44

<sup>2</sup> The commissioner notes that the Minnesota Department of Transportation incorporates a fuel adjustment clause in certain of its contracts to accommodate the fluctuating price of fuel. That clause generally provides for the adjustment of contract payments when the cost of fuel increases or decreases by more than 15% from an indexed rate during the term of the contract. By using 2011 fuel costs in certifying 2011 truck rental rates, the commissioner is not intending to adopt or establish a similar fuel adjustment mechanism. Rather, he is taking this action to effectuate the purpose of Part 5200.1105 in light of the concerns raised at the informal conference and the dramatic increase in the price of diesel between 2009 and effective date of 2011 truck rental rates.



The operating costs, including the average truck broker fees paid by those survey respondents who reported paying truck broker fees, and the truck rental rates may also be reviewed by accessing DLI's website at [www.dli.mn.gov](http://www.dli.mn.gov). Questions regarding the operational costs and truck rental rates can be answered by calling (651) 284-5091. The minimum truck rental rates certified for these five types of trucks in the state's ten highway and heavy construction areas will be effective for all highway and heavy construction projects financed in whole or part with state funds advertised for bid on or after April 4, 2011.

A handwritten signature in black ink, appearing to read "KBP", is written over the printed name of Ken B. Peterson.

KEN B. PETERSON  
COMMISSIONER

## DIVISION S

### **S-1**    **DESCRIPTION**

The Contract stipulations that follow are general in scope and may refer to conditions that will not be encountered on the work covered by the Contract. Any provision of these general requirements that pertains to a nonexistent condition or is not applicable to the work to be performed here under, or that conflicts with any provision of the Special Provisions or with any special instructions to bidders, shall have no meaning in the Contract and shall be disregarded

### **S-2**    **REFERENCE DOCUMENTATION**

Reference Documentation shall be the latest edition, including amendments and published updates, issued prior to the date of advertisement for bids or the date of request for quotations, of the following:

1. Minnesota Department of Transportation (Mn/DOT) Standard Specifications for Construction.
2. City of Rochester Ordinances.
3. City of Rochester Standard Detail Plates.
4. City of Rochester Standard Specifications for Street & Utility Construction.

### **S-3**    **DESIGNATION OF PARTIES**

#### **S-3.1**    "City"

"City" shall mean the City of Rochester, 201 4<sup>th</sup> Street SE, Room 108, Rochester, MN 55904.

#### **S-3.2**    "Owner"

"Owner" shall mean the City of Rochester, 201 4<sup>th</sup> Street SE, Room 108, Rochester, MN 55904 or as named in the contract documents.

#### **S-3.3**    "Department"

"Department" shall mean the City of Rochester, 201 4<sup>th</sup> Street SE, Room 108, Rochester, MN 55904 or as named in the contract documents.

#### **S-3.4**    "Engineer"

"Engineer" shall mean the City Engineer or other authorized representative of the Owner as named in the contract documents.

#### **S-3.5**    "Inspector"

"Inspector" shall mean the Engineer's authorized representative assigned to make inspections of Contract performance.

#### **S-3.6**    "Bidder"

"Bidder" shall mean any individual or entity submitting a Proposal for the advertised work.

#### **S-3.7**    "Contractor"

"Contractor" shall mean the individual or entity designated in the Contract documents to construct the project pursuant to plans and specifications.

#### **S-3.8**    "Sub-Contractor"

"Sub-Contractor" shall mean the individual or entity acting for or on behalf of the Contractor in performing any part of the Contract.

#### **S-3.9**    "Mndot"

"Mndot" shall mean the Minnesota Department of Transportation.



**S-4**     **DEFINITION OF TERMS**

**S-4.1**     Amount of Contract

For the purpose of awarding the Contract and determining the amount of the Bond, the Contract amount shall be the total amount of the bid.

**S-4.2**     Date of Acceptance

Date of Acceptance shall be the day when final inspection reveals that the work has been completed in strict accordance with the provisions of the Plans and other Contract documents, and with previous inspection documents.

**S-4.3**     Date of Final Acceptance

Date of Final Acceptance shall be a day, at least two (2) years after the Date of Acceptance, at which time the City determines that the work continues to be in strict accordance with the provisions of the Plans and other Contract and inspection documents. The Date of Final Acceptance denotes the termination of Contractor's maintenance obligation.

**S-4.4**     Liquidated Damages

Liquidated damages are the amount prescribed in Mn/DOT Section 1807 to be paid to the Owner, or to be deducted from any payments due or to become due to the Contractor, for each day that work remains uncompleted after expiration of the Contract time as determined and extended in accordance with Mn/DOT Section 1806.

**S-4.5**     "Incidental"

Whenever in any section of the Contract documents, Plans or Specifications, any item, material or application is defined as incidental, Payment shall be incidental to the Contract and no direct compensation will be made.

**S-4.6**     "Or Approved Equal" Clause

Whenever in any section of the Contract documents, Plans or Specifications, any article, material or equipment is defined by describing a proprietary product, or by using the name of manufacturer or vendor, the term "or approved equal" if not inserted, shall be implied.

The specific article, material, or equipment mentioned shall be understood as indicating the type, function, minimum standard of design, efficiency, and quality required and shall not be construed in such a manner as to exclude manufactured products of comparable quality, design, and efficiency. The Engineer shall determine the acceptability of articles, materials, or equipment proposed "as equal".

**S-4.7**     Standard Documents

Standard Documents are those that are referred to but not included in the Plans, Specifications and Special Provisions. Standard Documents are available to the public and it is the Contractor's sole responsibility to obtain and understand the requirements of any Standard Documents noted in the Plans, Specifications and Special Provisions. Examples of Standard Documents include but are not limited to:

Bid documents (Advertisement, Information to Bidders, Proposal and Bid Security)

Performance and Payment Bond forms

Project Specifications and Special Provisions

City of Rochester, Minnesota, Department of Public Works documents:

**Standard Specifications for Street and Utility Construction**

**Standard Detail Plates**

Minnesota Department of Transportation documents:

**Standard Specifications for Construction.**

**Standard Plates Manual.**  
ASTM Material Specifications.

**S-5 CONTRACT WORDING**

Whenever in these Contract documents the words "As Ordered", "As Directed", "As Required", "As Permitted", "As Allowed", or words or phrases of like import are used, it shall be understood that the order, direction, requirement, permission, or allowance of the Owner and Engineer is intended.

Similarly the words "Approved", "Reasonable", "Suitable", "Acceptable", "Properly", "Satisfactory", or words of like effect and import, unless otherwise particularly specified therein, shall mean approved, reasonable, suitable, acceptable, proper, or satisfactory in the judgment of the Owner and Engineer.

**S-6 BIDDING REQUIREMENTS AND CONDITIONS**

**S-6.1 Preparation of Proposal**

The Bidder shall submit his/her proposal on the complete booklet Bid Form obtained from the City or by a third party employed by the City to prepare and/or supply the Bid Form and other bid documents. The Bid Form will identify the Project and may describe the Work by listing estimated quantities, units of measure, items of work, and Materials to be furnished. The bidder shall specify unit prices, extensions, a total of the extensions and summations, initialing any and all changes made. The bidder must acknowledge receipt of and agree that the proposal is based on all addenda received after receipt of the initial bid packet.

The quantities and unit prices identified on the Bid Forms will be used to develop the bid, and as a basis for establishing partial payment and change order values. Final payment will be based on final unit quantities measured in the field, on the lump sum contract amount, or a combination of both as specified in the bid packet for each project.

All bids must state the price bid for all items listed on the Bid Forms, which price shall include all labor and materials required for the complete execution of the work. All prices must be stated in figures. The unit prices will be considered to be the offer in case of any variation between unit prices and totals stated by the bidder. All amounts and totals will be subject to verification between unit prices and totals stated by the bidder. All amounts and totals will be subject to verification by the City of Rochester.

All bid prices must be clear, legible and must be written in ink or typed. If prices and/or totals are unclear, illegible or written in pencil, the City reserves the right not to read the bid and/or reject it. The place of residence of each bidder must be given after his/her signature, which must be written in full. Two proposals under different names will not be received from on firm or association, and shall be cause for each bid to be rejected.

**S-6.2 Bid Submittal**

The authorized Bid Forms shall be submitted at the time and place specified in the Advertisement for Bids.

In submitting the bid, you must:

**S-6.3 Return the complete booklet containing the completed bid Form of Proposal and Special Provisions together with the Bid Guaranty and such other documentation as is required, in a sealed envelope to:**

City Clerk  
City of Rochester  
201 4<sup>th</sup> St. SE, Room 135,  
Rochester, MN 55904-3742



- S-6.4 Write the Project title, the name and address of the bidder, and the date of the opening on the sealed envelope.
- S-6.5 Fill in all blanks in the Schedule of Prices and initial any and all changes made.
- S-6.6 Acknowledge any and all addenda.
- S-6.7 Enclose the Proposal Guaranty: submit a bid bond, cashier's check or a certified check payable to the City of Rochester, Minnesota, for at least five (5) percent of the amount of the bid.
- S-6.8 Visit the site and become familiar with the general, local and site conditions that may affect cost, progress, and performance of the Work.
- S-6.9 If the Bid is sent through the mail or other delivery system, the sealed envelope shall be enclosed in a separate envelope, with a notation "BID ENCLOSED" on the face of the envelope. The Bidder shall assume full responsibility for the timely delivery at the location designated in the Advertisement for Bids for receipt of Bids. Bids turned in or received after that time will not be read, and will be returned, unopened.
- S-6.10 Qualifications of Bidders
- BIDDERS may be required to submit satisfactory evidence that they have a practical knowledge of the particular work bid upon, and that they have necessary financial and material resources to complete the proposed work. Such data shall be submitted upon request of the Owner. In determining the responsibility of a particular bidder, the following elements will be considered:
- Whether the Bidder:
- (a) maintains a permanent place of business;
  - (b) has adequate equipment and personnel to do work properly and expeditiously within the Contract time;
  - (c) has suitable financial status to meet obligations incident to the work; and
  - (d) has appropriate technical experience.
- Each Bidder may be required to show that former work performed by Bidder's company has been handled in such a manner that there are no just or proper claims pending against such work. No Bidder will be considered responsible if it is engaged in other work that impairs its ability to finance this Contract or to provide adequate labor and equipment for the proper execution of the work required. Each Bidder shall demonstrate its ability to meet all requirements of the Contract by evidence satisfactory to the City.
- S-6.11 Proposal
- All persons requesting a Proposal will be required to register as a Plan holder and provide the Owner with their name, address, phone number and fax number. Failure to provide the requested information will relieve the City of any responsibility to provide that Plan holder with any Addenda that may be issued.
- S-6.12 Bid Security
- A certified check, cashiers check or bidders bond in an amount equal to at least five percent (5%) of the total bid amount must accompany each bid as a guarantee that the Bidder will execute the Contract and give a Performance Bond as required if awarded the Contract. The Rochester Home Rule Charter requires this bid security and failure to comply is a material bid defect that may not be waived.
- The Bid Security shall be made payable to the City of Rochester, Minnesota.



Upon failure or refusal, on the part of the successful Bidder to enter into the Contract and furnish the necessary Bond within the time specified, the Bid Security shall be forfeited to the City.

**S-6.13**      **Written Addenda**

Written Addenda is the only method acceptable for changes to the Contract Documents prior to the Bid Date. Verbal comments, statements, or instructions made by any representative of the Owner shall not be considered a part of the Contract Documents. Written Addenda shall be made part of the Contract Documents. The Engineer may either fax or mail the Addenda to all registered Plan holders. The Bidder shall acknowledge receipt of each Addendum on the face of the envelope containing its bid.

**S-7**      **AWARD AND EXECUTION OF CONTRACT**

**S-7.1**      **Payment and Performance Bonds**

The successful Bidder, at the time of the execution of the Contract, shall furnish a Payment Bond equal to the Contract amount and a Performance Bond equal to the Contract amount, as required by Minn. Stat. Section 574.26. The bonds shall be issued by sureties satisfactory to the City and authorized to do business in the State of Minnesota.

The Payment Bond and Performance Bond shall guarantee that the Contractor will perform each and every part of the agreement, cover all guarantees called for in these Specifications, including the provisions for maintenance and repair, and insure the prompt payment to all persons furnishing material and labor required in the prosecution of the work. The Performance Bond shall be written in such a manner that it shall remain effective until the Date of Final Acceptance (two (2) years after the Date of Acceptance by the City, provided the work is in accordance with the Specifications and any inspection instructions, and all defects identified during the two (2) year period have been corrected).

In the event the Surety on any Bond furnished by the Contractor is declared bankrupt or becomes insolvent, or its right to do business in Minnesota is terminated, or it otherwise ceases to meet the requirements set forth herein, the Contractor shall, within five days thereafter, substitute another Bond and Surety, both of which shall be subject to Owner's acceptance.

If notice of any change affecting the general scope of the Work or change in the Contract Price is required by the provisions of any Bond to be given to the Surety, it will be the Contractor's responsibility to so notify the Surety, and the amount of each applicable Bond shall be adjusted accordingly. Contractor shall furnish proof of such adjustment to the Owner.

**S-7.2**      **Execution of Contract**

The Contractor shall not, under any circumstance, assign the Contract or any payments due hereunder without written permission by the City.

The Contract will be made on the forms used by the City of Rochester, and made a part of the General Requirements and Covenants, copies of which are also on file at the office of the City Clerk, Room 135, City Hall, Rochester, Minnesota.

**S-8**      **CONTROL OF WORK**

**S-8.1**      **Drawing and Specification**



The Specifications and Plans are intended to supplement, but not necessarily duplicate each other, and together constitute one complete set of Specifications and Plans so that any work exhibited in the one and not in the other, shall be executed as if it has been set forth in both, in order that the work shall be completed according to the complete design or designs as decided and determined by the Engineer.

Should anything be omitted from the Specifications and Plans that is necessary to a clear understanding of the work, or should it appear various instructions are in conflict, the Contractor shall secure written instructions from the Engineer before proceeding with the construction affected by such omissions or discrepancies. It is understood and agreed that the work shall be performed and completed according to the true spirit, meaning, and intent of the Contract, Plans, and Specifications.

All Drawings, Specifications and copies thereof furnished by the City are its property. They are not to be used on other work and, with the exception of the signed Contract, plan sets are to be returned to the City upon request at the completion of the work.

Contractor shall keep and maintain one complete set of all drawings and specifications, addenda, approved shop drawings, change orders and other modifications at the job site that shall be available to the Engineer at all times.

**S-8.2 Surveys, Staking and Monument Preservation**

The Contractor shall give the Engineer at least 2 working days notice before requiring any stakes to be set or before commencing work on any portion of the Contract, or at any new place, as well as at any place where work has been relinquished or stopped for any reason.

Any work done without being properly located and established by base lines, offset stakes, bench marks, or other basic reference points located, established, or checked by the Engineer, may be ordered removed and replaced at the Contractor's cost and expense.

The Contractor shall carefully protect and preserve any permanent monuments or benchmarks that must of necessity be removed or disturbed in the construction of the work, until they can be properly referenced for relocation.

**S-8.3 Other Contracts and Contractors**

The Owner reserves the right to award contracts to other Contractors who do additional work at the site of this Project pursuant to Mn/DOT section 1505.

**S-8.4 Testing of Completed Work**

Before final acceptance, all parts of the work shall be tested and each part shall be in good condition and working order, or shall be placed in such condition and order at the expense of the Contractor. All tests of completed work required under this Contract shall be made under the direction of the Engineer or others so designated and at the expense of the Contractor, who shall repair at its own expense all damage resulting there from.

**S-9 LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC**

**S-9.1 Permits, Public Utilities and Code Requirements**

The Contractor shall make the necessary arrangements for the use or installation of, and shall pay for, any and all utility service that may be necessary in conducting its work. The Contractor must obtain permission from the City of Rochester Water Department if it is necessary to use City water, and said use of water shall be under the City's direction and supervision. The use of existing private water services adjacent to the work shall be arranged and paid for by the Contractor.

If work is to be performed in State of Minnesota Right-Of-Way, the City shall apply for a "Utilities on Trunk Highway" Permit from the Minnesota Department of Transportation. The Contractor shall not initiate the work prior to receipt of the permit. All regulations and rules contained in this permit shall apply and will be considered a part of the Special Provisions. The Contractor shall furnish a certified check or surety bond in the amount required by and in favor of the State of Minnesota, Commissioner of Transportation.

S-9.2 Contractor's Insurance

The Contractor shall not commence work under this Contract until it has obtained and submitted to the City written evidence of all insurance required under this paragraph and such insurance has been approved by the City, nor shall the Contractor allow any sub-Contractor to commence work on its subcontract until all similar insurance required of the sub-Contractor has been obtained and approved.

Compensation Insurance

Worker's Compensation Insurance shall be as required by the laws of the State of Minnesota.

General Liability and Property Damage Insurance.

The Contractor shall take out and maintain during the life of the Contract such General Liability and Property Damage Insurance as shall protect him and any sub-Contractor from claims while performing work covered by this Contract. The certificates of insurance shall indicate that the City is an additional insured. The required amounts of such insurance are as follows:

General Liability, Personal injury and Property damage

1. Injury or death of one person..... \$1,000,000
2. Injury to more than one person in a single accident or occurrence  
..... \$1,000,000
3. Property damage..... \$1,000,000
4. Products – Comp/Op Aggregate..... \$1,000,000
5. General Aggregate ..... \$2,000,000

X-C-U Hazards

Same limits as above. Basic exclusions for eXplosions, Collapse, and Underground hazards shall be removed from the policy, and so indicated as covered in the declarations on the certificates of insurance.

Automobile Liability and Property Damage Insurance

The Contractor shall take out and maintain during the life of the Contract, Automobile Liability and Property Damage Insurance on all self-propelled vehicles used in connection with the Contract whether owned, non-owned, or hired site and the amounts of such insurance shall be as follows:

1. Injury or death of one person..... \$1,000,000
2. Injury to more than one person in a single accident or occurrence  
..... \$1,000,000
3. Property damage..... \$1,000,000

Satisfactory Coverage

In the event that the form of any policy or certificates or the amount of the insurance is not satisfactory to the City, the Contractor shall secure other policies or certificates in a form and amount satisfactory to the City.

The Contractor shall not cause any policies to be canceled or permit them to lapse, and all insurance policies shall include a clause to the effect that the policy



shall not be canceled or changed until 30 days after the City has received written notice as evidenced by the return receipt of registered letter.

Proof of Carriage of Insurance

Written evidence of insurance shall contain true transcripts from the policy, authenticated by the proper officer of the insurer, evidencing in particular those insured, the extent of the insurance, the location and operations to which the insurance applies, the effective date and expiration date and the notice of cancellation clause mentioned herein above.

The Contractor shall comply with all federal, state, and local laws and ordinances applicable to the work to be done under this agreement. The Contractor shall defend, save and hold harmless the City of Rochester and its officers, agents, employees, and members, from all claims, suits, or actions of whatsoever nature resulting from or arising out of the activities of the Contractor or its subcontractors, agents, or employees under the Contract.

S-9.3 Mediation

The resolution of any dispute, controversy or claim arising out of or relating to this Contract or the relationship between the parties shall first be attempted through a mediation process. Such mediation shall be conducted in the City of Rochester, Minnesota, or such other location as the parties may mutually agree. The parties shall share the mediator's fee equally. The mediation shall be conducted by a mediator mutually agreed upon between the parties. If the parties are unable to agree upon a single mediator within thirty days after one party has delivered written notice to the other party requesting mediation of a stated dispute, each party shall select one mediator and the selected mediator shall select a third mediator who alone shall attempt resolution of the dispute. Either party may take action in Olmsted District Court should mediation not result in a resolution of the dispute.

S-9.4 Use of Explosives

The Contractor shall obtain a User Permit from the Chief of Police for the City of Rochester prior to the transporting, storage or use of explosives, and shall comply with all conditions imposed therein.

S-9.5 Noise Control

The Contractor shall comply with the requirements of Chapter 85, Section 85.10 of the Rochester Code of Ordinances:

"Noises Prohibited.

Subdivision 1 Unnecessary Noises Generally. No person shall make, continue, or cause to be made or continued any loud, unnecessary or unusual noise which unreasonably annoys, disturbs, injures or endangers the comfort, convenience, safety, health, welfare or repose of persons in the vicinity thereof, unless the making, continuing, or causing to be made or continued of such noise cannot be prevented and is necessary for the protection or preservation of property or of the health, safety, life or limb of some person.

Subdivision 2 Construction or Repair of Buildings, or Construction work.

- I. The erection (including excavation), demolition, alteration or repair of any building requiring a building permit or the performance of any construction work occurring between the hours of 10:00p.m. and 7:00 a.m. on Monday through Saturday, from 10:00 p.m. Saturday through 12:00 p.m. Sunday, and from 10:00 p.m. Sunday through 7:00 a.m. Monday is a violation of this section. For purposes of this section, "construction work" shall mean any and all activity incidental to the erection of

- buildings, structures, roads, flood control facilities, or appurtenances thereto, including land clearing, grading, excavating, and filling.
- II. Notwithstanding this section, a permit may be obtained to allow construction work to occur during the prohibited hours described in (a) in cases of urgent necessity in the interest of public health and safety. The permit shall be granted for a period not to exceed three days, shall continue only so long as the necessity continues, and may be extended for periods of three days or less so long as the necessity continues.
  - III. Notwithstanding this section, a permit may be obtained to allow construction work to occur during the prohibited hours described in (a) if it is determined that the public health and safety is not impaired by the erection, demolition, alteration, or repair of any building, or the performance of construction work occurring during such hours, and further determines that loss or inconvenience would result to any party in interest. Application for a permit may be made at the time the permit for the work is awarded or during the progress of the work.
  - IV. The permits described in (b) and (c) shall be issued by the building inspector in cases involving a building for which a building permit is required. In all other cases, the permit shall be issued by the city engineer."

#### **S-10 MEASUREMENT & PAYMENT**

##### **S-10.1 Partial Payment**

Unless the terms of the contract provide otherwise, progress payments shall be made monthly as the work progresses. Payments shall be based upon estimates of work completed as approved by the City. A progress payment shall not be considered acceptance or approval of any work or waiver of any defects therein.

The City may reserve as retainage from any progress payment an amount not to exceed five percent of the payment. The City may reduce the amount of the retainage and may eliminate retainage on any monthly contract payment if, in the City's opinion, the work is progressing satisfactorily.

For further details refer to Mn/DOT specification 1906 "Partial Payments".

##### **S-10.2 Acceptance and Final Payment**

When final inspection reveals that the work has been completed in strict accordance with the provisions of the Plans, other Contract documents, and previous inspection instructions, the Engineer shall, within ninety (90) days thereafter, prepare a final estimate which shall be based on accurate measurements of all work performed, and shall submit such estimate together with recommendations to the City Council of the City of Rochester for approval. Payment shall then be made for all work performed under the Contract, less any partial payments already made and any legal deductions or forfeitures for the satisfaction of liens or other claims against the Contract.

##### **S-10.3 Correction of Work After Final Payment**

Neither acceptance and occupancy by the Owner, final payment, nor any other provision in the Contract documents, shall relieve the Contractor of its maintenance obligation as hereinafter set forth and as identified in the Specifications.

##### **S-10.4 Maintenance and Repair**

The Contractor shall guarantee all work relating to the Specifications for a period of at least two (2) years from the date of written acceptance of the work or project. The Contractor shall make all needed repairs arising out of defective workmanship or materials that, in the judgment of the City, become necessary during such period. Final acceptance and termination of the maintenance obligation shall occur on the date two



(2) years after initial acceptance provided that the work is in accordance with the Specifications and any inspection instructions. The maintenance obligation shall otherwise continue until all defects, including defective equipment installed therein, have been corrected.

At any time prior to Final Acceptance (the time during which the maintenance obligation is in effect as provided herein) the City may demand that the Contractor make any noted repairs. If Contractor fails to undertake repairs within ten days after the mailing of a notice of the need to make such repairs, the City may either take action against the performance bond or make the repairs itself and recover the cost from Contractor or the surety under the performance bond.

#### **S-11 OWNER AND EASEMENTS**

The City of Rochester is designated as the Owner. All work shall be located on public right-of-way or on easements to be provided by the Owner. The Contractor shall confine his operations at all times within the limits of the easements. Any repairs or restoration outside the easement limits, required due to the Contractor's carelessness, shall be made with no compensation allowed.

- 1. If the Contractor obtains an agreement with a private land owner related to this project the City shall be provided a copy signed by the owner.**

#### **S-12 CONFLICTS IN DIMENSIONING**

In case of conflict between dimensions shown on the plans or detail drawing and those in the specifications, the dimensions on the drawings shall govern. If the conflict is other than dimensions, the specifications shall govern.

#### **S-13 PRE-CONSTRUCTION CONFERENCE**

A pre-construction conference will be scheduled after Engineer's receipt of the Contractor's schedule. The Contractor shall submit to the Engineer a schedule illustrating in bar chart form the anticipated commencement date and duration of each of the major work tasks prior to the pre-construction conference. These tasks shall be broken down by type of work and location as necessary for purposes of planning and coordinating the work of this contract. The schedule should address the phasing of construction in a manner that will provide good project coordination. The Contractor will be required to update or modify the written construction schedule as necessary to accurately reflect the rate and progress on the project.

The conference will be held with the Contractor, City Representative, Engineer and other parties involved in the project. Materials, material sources, construction methods, and scheduling will be reviewed and any questions or procedures will be clarified.

#### **S-14 CONTACT INFORMATION**

Questions regarding this Project shall be directed to:

Russ Kelm  
Design Engineer  
City of Rochester  
(507) 328-2417

**S-15 SPECIAL PROVISIONS ENCOURAGING INDIAN EMPLOYMENT**

It is Mn/DOT policy to promote and encourage Indian employment on transportation projects on or near reservations.

- S-15.1 This Project is on or near the **Prairie Island** reservation. The Contractor is advised to work with the tribal government to utilize Indian labor in performing Contract work. The Contractor should contact **Eleanore Bartell Human Resources Dir.** from the **Prairie Island Indian Community Council, Dept. of Human Resources, 5636 Sturgeon Lake Road, Welch, MN 55089**, at **(651) 385-4138** for Indian employment opportunities under this Contract.
- S-15.2 On-the-job training requirements have been established for this project. Mn/DOT advises the Contractor to consider Indians for designated OJT positions. These OJT positions can be in skilled (such as heavy equipment operators, truck drivers and carpenters) and non-skilled areas of employment.
- S-15.3 The specific OJT requirements for this Project can be found in Section S-2041 (ON-THE-JOB-TRAINING PROGRAM) of these Special Provisions.
- S-15.4 The Contractor and all subcontractors are hereby made aware that this Special Provision is made part of the Contract and that Mn/DOT will monitor these provisions. If the Contractor or subcontractor is not living up to the spirit of the Special Provisions, the Department will address these issues with the Contractor and/or subcontractor and the Tribal Contact Person. If requested by the tribe, the Contractor will meet with the tribe's contact person to discuss Indian employment issues.
- S-15.5 If the Contractor deems that an employee referred by the Tribal Contact Person is in danger of being suspended or terminated, the Contractor shall notify the Tribal Contact Person for assistance in resolving the problem. Nothing in the Special Provisions will be construed to interfere with the Contractor's ability to dismiss any employee for cause including, but not limited to, lack of adequate skills or training, inability to perform by virtue of state or federal law, or breach of the Contractor's standards of conduct.
- S-15.6 This Special Provision supplement does not replace the existing equal employment opportunity requirements contained elsewhere in this Contract.
- S-15.7 Questions, other than Tribal Employment questions, should be directed as indicated in the CONTACT INFORMATION section of these Special Provisions.

**S-16 RESIDENT PREFERENCE IN PUBLIC CONTRACTS**

The provisions of Mn/DOT 1302 are modified to the extent that, in accordance with Minnesota Statutes, section 16.365 (1982) as amended by Minn. Laws 1984, Chapter 440, Section 2, (Resident Preference in Public Contracts), this Contract will be awarded to the lowest responsible bidder, with resident bidders allowed a preference as against a non-resident bidder from a state which gives or requires a preference to bidders from that state, the preference shall be equal to the preferences given or required by the state of the non-resident bidder.

**S-17 (1213) DISQUALIFICATION OF BIDDERS**

The provisions of Mn/DOT 1213 are hereby deleted and replaced with the following:

- S-17.1 Either of the following reasons may be considered sufficient cause for disqualification of a bidder and the rejection of his Proposals:
- (1) More than one Proposal for the same work from an individual, firm, or corporation under the same or different name. Substitute bid schedules shall be governed by Mn/DOT 1206.



- (2) Evidence of collusion among bidders. Participants in collusion will receive no recognition as bidders on future work until they have been reinstated as responsible bidders.

**S-18 (1302) AWARD OF CONTRACT RESIDENT PREFERENCE IN PUBLIC CONTRACTS**

The provisions of Mn/DOT 1302 are modified to the extent that, in accordance with Minnesota Statutes, section 16.365 (1982) as amended by Minn. Laws 1984, Chapter 440, Section 2, (Resident Preference in Public Contracts), this Contract will be awarded to the lowest responsible bidder, with resident bidders allowed a preference as against a non-resident bidder from a state which gives or requires a preference to bidders from that state, the preference shall be equal to the preferences given or required by the state of the non-resident bidder.

The City shall have up to **60 days** from the bid opening to award the contract during which time the bid unit prices shall prevail.

**S-19 (1305) REQUIREMENT OF CONTRACT BOND**

The provisions of Mn/DOT 1305 are hereby deleted and replaced with the following:

The successful bidder shall furnish a payment bond equal to the contract amount and a performance bond equal to the contract amount as required by Minnesota Statutes, section 574.26. The surety and form of the bonds shall be subject to the approval of the contracting authority.

The contracting authority shall require for all contracts less than or equal to five million dollars (\$5,000,000.00), that the aggregate liability of the payment and performance bonds shall be twice the amount of the contract. All contracts in excess of five million dollars (\$5,000,000.00) shall have an aggregate liability equal to the amount of the contract.

**S-20 (1404) MAINTENANCE OF TRAFFIC, (1707) PUBLIC SAFETY, AND (2563) TRAFFIC CONTROL**

The provisions of 1404 are supplemented as follows:

The Contractor shall furnish, install, maintain, and remove all traffic control devices required to provide safe movement of vehicular and/or pedestrian traffic passing through the work zone during the life of the Contract from the start of Contract operations to the final completion thereof. The Engineer will have the right to modify the requirements for traffic control as deemed necessary due to existing field conditions.

Traffic control devices include, but are not limited to, barricades, warning signs, trailers, flashers, cones, drums, pavement markings and flaggers as required and sufficient barricade weights to maintain barricade stability.

The Contractor shall furnish names, addresses, and phone numbers of at least three (3) individuals responsible for the placement and maintenance of traffic control devices. At least one of these individuals shall be "on call" 24 hours per day, seven days per week during the times any traffic control devices, furnished and installed by the Contractor, are in place. The required information shall be submitted to the Engineer at the Pre-construction Conference. The Contractor shall also furnish the names, addresses, and phone numbers of those individuals to the following:

- |    |                                   |                |
|----|-----------------------------------|----------------|
| 1. | Rochester Public Works Department | (507) 328-2400 |
| 2. | Rochester Police Department       | (507) 328-2800 |
| 3. | Local Fire Department             | (507) 328-6300 |
| 4. | City/Township Clerk               | (507) 328-2900 |



The Contractor shall, at the pre-construction conference, designate a Work Zone Safety Coordinator who shall be responsible for safety and traffic control management in the Project work zone. The Work Zone Safety Coordinator shall be either an employee of the Contractor such as a superintendent or a foreman, or an employee of a firm which has a subcontract for overall work zone safety and traffic control management for the Project. The responsibilities of the Work Zone Safety Coordinator shall include, but not be limited to:

- Coordinating all work zone traffic control operations of the Project, including those of the Contractor, subcontractors and suppliers.
- Establishing contact with local school district, government, law enforcement, and emergency response agencies affected by construction before work begins.
- Maintaining a record of all known crashes within a work zone. This record should include all available information, such as: time of day, probable cause, location, pictures, sketches, weather conditions, interferences to traffic, etc. These records shall be made available to the Engineer upon request.

The Contractor shall inspect, on a daily basis, all traffic control devices, which the Contractor has furnished and installed, and verify that the devices are placed in accordance with the Traffic Control Layouts, these Special Provisions, and/or the MN MUTCD. Any discrepancy between the placement and the required placement shall be immediately corrected. The person performing the inspection shall be required to make a daily log. This log shall also include the date and time any changes in the stages, phases, or portions thereof go into effect. The log shall identify the location and verify that the devices are placed as directed or corrected in accordance with the Plan. All entries in the log shall include the date and time of the entry and be signed by the person making the inspection. The Engineer reserves the right to request copies of the logs as he deems necessary.

#### **S-20.1 Maintenance and Staging of Traffic Control:**

The Contractor is hereby advised that the phasing, construction staging, the work sequencing, and the maintenance of pedestrian and vehicular traffic control and related signage are critical on this project. The Contractor shall fully expect to employ significant measures to control and maintain pedestrian, vehicular traffic throughout the life of the project. The major phases of construction are as follows:

#### **Construction and Traffic Control Phases**

**ADVANCE SIGNING SHALL BE INSTALLED 7 DAYS BEFORE CONSTRUCTION IS TO BEGIN** as approximately located in the plan and as approved by the Engineer. The Contractor shall notify the Engineer at least five (5) working days in advance of his intent to close lanes.

Prior to the start of the work, the contractor shall submit detailed traffic control plans for approval by the engineer. The Traffic Control Plan shall present the traffic control devices and layouts required for each stage of work. The plan shall also indicate maintenance and routing of pedestrian traffic throughout the project corridor.

The contractor is hereby advised that the phasing, construction staging, the work sequencing, and the maintenance of pedestrian and vehicular traffic control and related signage are critical on this project. The contractor shall fully expect to employ significant measures to control and maintain pedestrian and vehicular traffic throughout the life of the project. The plan set includes a Construction Staging Plan and Traffic Control Plan sheets presenting **6 stages** as follows:

#### **Pinewood Road SE**

For major construction activities, the Contractor shall close the road in 5 stages, in order to ensure access to abutting avenue neighborhoods. Major thru traffic shall be detoured as shown on the plans. Each stage shall be completed through the Bituminous Base course or a Maintained Aggregate Surface



prior to closing the next stage. A Maintained Aggregate surface includes dust free, free of ruts and wash boarding.

There is one time sensitive stage that shall not be closed during the school year to allow maximum safe access to the elementary school. That stage is shown from 11<sup>th</sup> Ave SE to approximately half way between Mc Quillan Court SE.

### **30<sup>th</sup> Ave SE**

For major construction activities, the Contractor shall close the road in 1 stage, in order to ensure access to abutting avenue neighborhoods. Major through traffic shall be detoured as shown on the plans. Each stage shall be completed through the Bituminous Base course or a Maintained Aggregate Surface prior to closing the next stage. A Maintained Aggregate surface includes dust free, free of ruts and wash boarding.

### **Pedestrian Facilities**

Shall be closed during construction operations under this contract, except as hereinafter provided:

1. During the School season
2. Bear Creek Trail shall remain open at all times on a minimum 6" gravel surface.

### **11<sup>th</sup> Ave SE (CSAH 1) and Marion Road SE (CSAH 36)**

Shall remain open to through traffic at all times during construction operations under this contract, except as hereinafter provided:

1. When the Contractor is constructing a stage that is abutting the County Road, the right turn lane and shoulder area shall be closed for major construction activities.
2. The Contractor shall complete the major construction activity as quickly as possible in order to re-open the lane/shoulder that was closed.

### **Schools, Parks and Commercial Businesses**

The Contractor is advised of the Elementary School, Canine Park, School Bus Facility, and commercial businesses in proximity of project limits. The Contractor shall employ extraordinary measures to ensure access during business and Parks hours. This includes but is not limited to;

1. Communication with the City Parks Staff on upcoming park events
2. Communication with the School District Staff on upcoming events
3. Use of Trench boxes for utility work,
4. maintaining access, dust and noise in the area in preparation for special events
5. maintaining a gravel access point, after removals
6. constructing the concrete approaches in two halves
7. temporary signage 6" letters black/orange

in order to provide for the safe passage of local traffic, limit the work zone size, and redirect customers from the area.

**Local access to abutting property** must be maintained at all times. Several residential properties exist along the project corridor. Access to abutting properties shall be maintained at all times which may include constructing the concrete approaches in two halves. The Contractor is required to maintain road surfaces so that any local traffic abutting the project can safely travel within the project. At all times throughout this project, the Contractor shall keep all directly affected property owners informed as to the appropriate access route being provided and maintained for them.

A traffic flow pattern on city streets shall be maintained to provide emergency vehicle access to all property. Fire hydrants, on or adjacent to the work, shall be kept accessible to firefighting equipment at

all times. All street closings shall be approved by the city prior to closing. The temporary closing of any streets will require the installation of sufficient barricades, fences, and signs, to adequately deter traffic from entering the sites. If the streets are not closed, one lane of traffic shall be maintained at all times, and signs installed indicating "local traffic only".

Haul routes shall generally be along C.S.A.H. streets or trunk highways, and coordinated with the engineer.

**S-20.2 Measurement and Payment**

No measurement will be made of the various Items that constitute Traffic Control but all such work will be construed to be included in the single Lump Sum payment under Item 2563.601 (Traffic Control)

<u>Item No.</u>	<u>Item</u>	<u>Unit</u>
2563.601	TRAFFIC CONTROL.....	LUMP SUM

**S-21 (1506) SUPERVISION BY CONTRACTOR**

The provisions of Mn/DOT 1506 are supplemented as follows:

At the Preconstruction Conference the Contractor shall designate in writing who the competent superintendent and competent individual (if different) will be for this Project. These persons can only be changed throughout the duration of the Project by submission of written authorization to the Engineer by the Contractor. The submittal of these persons shall be done before any work is performed on this Project.

The Contractor will be subject to an hourly charge for failure to comply with the requirements of Mn/DOT 1506. Non-Compliance charges, for each incident, will be **assessed at a rate of \$100 per hour**, for each hour or portion thereof, during which the Engineer determines that the Contractor has not complied. No charge will be made if the deficiency is corrected within one (1) hour of notification.

An incident of Non-Compliance will be defined as the receipt of a written work order by the Contractor with instructions to correct a deficiency.

**S-22 (1507) UTILITY PROPERTY AND SERVICE**

Construction operations in the proximity of utility properties shall be performed in accordance with the provisions of Mn/DOT 1507, except as modified below:

**S-22.1** The provisions of Mn/DOT 1507.1 B are hereby deleted and the following substituted therefore:

**B Gopher State One Call**

The Contractor shall:

- (1) Mark the proposed excavation in accordance with the Minnesota State Statute 216D color code before contacting "Gopher State One Call." The Contractor shall mark proposed excavation area with white paint and white flags or in lieu of white flags, white stakes may be used. The Contractor must adhere to all requirements of Gopher State One Call in addition to the following:

The white markings must delineate the **actual excavation area** where the locating of underground facilities is required. All flags and stakes shall display the name, and phone number of the Contractor. All areas of proposed excavation shall be considered "practical" for the use of white markings, pursuant to Minnesota Statutes §216D.05 (2).



- (2) Call "Gopher State One Call" at least 48 hours (excluding Saturdays, Sundays, and holidays) before starting excavation operations.
- (3) The Contractor shall acquire a Positive Response confirmation from Mn/DOT for all proposed excavations when the Gopher State One Call has indicated Mn/DOT utilities may be affected. The Contractor may call Mn/DOT Electrical Services Section (ESS) Dispatch Locating to confirm the status of Utility infrastructure owned by Mn/DOT. Mn/DOT Electrical Services Section (ESS) Dispatch Locating can be contacted at the following phone numbers; (651) 366 -5750 or (651) 366-5751. The Contractor shall be responsible for all damage to Mn/DOT owned Utility infrastructure if a Positive Response confirmation has not been acquired from Mn/DOT. The Contractor is required to comply with the provisions of Minnesota Statutes chapter 216D when performing Excavation as defined in Minnesota Statutes §216D.01 (subdivision 5), and will be responsible for damages to facilities in accordance with Minnesota Statutes §216D.06.

- S-22.2 All utilities that relate to this Project are classified as "**Level D**," unless the Plans specifically state otherwise. This utility quality level was determined according to the guidelines of CI/ASCE 38-02, entitled "Standard Guidelines for the Collection and depiction of existing subsurface utility data."
- S-22.3 By bidding on this Contract, the bidder agrees that it shall use the Plan to identify the location of Mn/DOT drainage facilities as satisfying the requirements of Minnesota Statutes Ch. 216D and Minnesota Rules 7560.0250 with respect to Mn/DOT's storm water drainage facilities.
- S-22.4 The following utility owners have existing facilities that may be affected by the work under this Contract, all of which they intend where necessary to relocate or adjust in advance of or concurrently with the Contractor's operations.

Full Name	Company	Description	Business Phone
Steve Hyke	MN Energy Resources	Gas - Yellow	(507) 529-5104
Ron Muller	Charter Communications	Cable-Orange	(507) 285-6164
Wally Carlson	Mayo Clinic Facilities	Other	(507) 266-8142
Kay Klemmer	Northern Natural Gas	Gas - Yellow	(507) 451-7760 3202
Pat Lynch	Zayo Bandwidth	Fiber Optics - Orange	(952) 230-4288
Rick Wellik	Peoples Cooperative Power	Communications - Orange	(507) 288-4004
Doug Feine	Public Works OWEF	Steam - Yellow	(507) 328-7033
Julie Schletty	Centurylink	Telephone - Orange	(507) 285-3629
Donn Richardson	Rochester Public Utilities	Water Dept - Blue	(507) 280-1509
Mike Engle	Rochester Public Utilities	Electric - Red	(507) 280-1579
Steve Cook	Rochester Public Utilities	Electric - Transmission	(507) 280-1590
Eric Loftus	Rochester Public Works	Sewer - Green	(507) 328-2437

- S-22.5 The Contractor shall coordinate his/her work and cooperate with the foregoing utility owners and their forces in a manner consistent with the provisions of Mn/DOT 1507 and the applicable provisions of Mn/DOT 1505.
- S-22.6 The City of Rochester utilities that are affected such as storm sewer, sanitary sewer, and water supply have been included in the Plan for adjustment or relocation. The Contractor shall notify Doug Nelson, Manager of Engineering at telephone (507) 328-2423, in advance

of the date he intends to start work and he shall furnish that office with such information as may be necessary to permit the responsible authorities to make suitable arrangements relative thereto.

- S-22.7 The Contractor shall verify all underground utility locations and elevations prior to construction. (Gopher State One Call 1-800-252-1166)

**S-23 (1601) SOURCE OF SUPPLY AND QUALITY**

The provision of Mn/DOT 1601 are supplemented as follows:

The Contractor will furnish and use only steel and iron materials manufactured in the United States in executing the work under this Contract, in conformance with the provision of the U.S. Code of Federal Regulations 23CFR635.410. Domestic products taken out of the United States for any process (e.g. change of chemical content, permanent shape or size, or final finish of product) shall be considered foreign source materials.

All bids must be based on furnishing domestic iron and steel, which includes the application of the coating, except where the cost of iron and steel materials incorporated in the work does not exceed one-tenth of one percent of the total Contract cost or \$2,500.00, whichever is greater. The state may approve the use of foreign iron and steel materials for particular Contract items, provided the bidder submits, a stipulation identifying the foreign source iron and/or steel product(s) and the estimated invoice cost of the product(s), for one or more of the Contract

bid items. Each stipulation shall be made on the "Stipulation for Foreign Iron or Steel Materials" form which shall be submitted with the Contractor's proposal. **If the Contractor chooses to use ANY non-domestic iron or steel, the Contractor must submit a stipulation with the proposal.**

Prior to completing work the Contractor shall submit to the Engineer a certification stating that all iron and steel items supplied are of domestic origin, except for non-domestic iron and steel specifically stipulated and permitted in accordance with the paragraph above.

- S-23.1 **Source of Supply and Quality.** Mn/DOT 1604 is supplemented as follows: All costs of shop inspection at plants outside the United States shall be borne by the Contractor. Such costs shall be deducted from monies due or to become due the Contractor.
- S-23.2 **Partial Payment.** All provisions for partial payments shall apply to domestic materials only. No payments shall be made to the Contractor for materials manufactured outside of the United States until such materials have been delivered to the job site.

**S-24 (1701) LAWS TO BE OBSERVED (DATA PRACTICES)**

The provisions of Mn/DOT 1701 are supplemented with the following:

- S-24.1 Bidders are advised that all data created, collected, received, maintained, or disseminated by the Contractor and any subcontractors in performing the work contained in this Contract are subject to the requirements of MN Statute Chapter 13, the Minnesota Government Data Practices Act (MGDPA). The Contractor shall comply with the requirements of the MGDPA in the same manner as the Department. The Contractor does not have a duty to provide access to public data to the public if the public data are available from the Department, except as required by the terms of the Contract.



---

**S-25 (1710) TRAFFIC CONTROL DEVICES**

All traffic control devices and methods shall conform to the Minnesota Manual on Uniform Traffic Control Devices (MN MUTCD), Minnesota Standard Signs Manuals Parts I and II, the Traffic Engineering Manual, and the following:

On any roadway having a 45 mph or higher speed limit prior to construction, all Category I and II temporary traffic control devices used after July 1, 2006 shall meet NCHRP 350 crash testing criteria. This includes all new and used Category I and Category II devices. Category I devices include tube markers, plastic drums and cones, etc. Category II devices include portable sign supports, Type I, II and III barricades, etc.

The Contractor shall provide the Project Engineer a Letter of Compliance stating that all of the Contractors Category I and II Devices are NCHRP 350 approved as of July 1, 2006. The Letter of Compliance must also include approved drawings of the different signs and devices and shall be provided to the Project Engineer at the Pre-construction meeting.

**S-26 (1717) NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT**

Pollution of natural resources of air, land and water by operations under this Contract shall be prevented, controlled, and abated in accordance with the rules, regulations, and standards adopted and established by the Minnesota Pollution Control Agency (M.P.C.A.), and in accordance with the provisions of Mn/DOT 1717, 1803.5 and the following:

**S-26.1 Minnesota Pollution Control Agency General Permit, Authorization to Discharge Storm Water.**

- A. The Contractor shall furnish, install and maintain temporary and permanent erosion and sediment control devices in accordance with the provisions of 2105.5, 2573, 2575, as shown in the Plans, in accordance with the provisions of the Special Provisions Attachment "Minnesota Pollution Control Agency General Permit, Authorization to Discharge Storm Water", and the following:  

The **City of Rochester** has applied for and received coverage under the above mentioned permit by signing both the Owner's and Contractor's certification blanks on the permit application. The City shall retain a photocopy of the original permit application. Upon award of the Contract, the City and the Contractor shall execute the Storm Water Permit Transfer/Modification Application form (attached to these Special Provisions) and submit it along with a photocopy of the original application to the Minnesota Pollution Control Agency. The Minnesota Pollution Control Agency, upon receipt of the Storm Water Permit Transfer Modification Application, will amend it to the original permit application thereby making both the City and the Contractor co-permittees for the requirements of the General Permit, "Authorization to Discharge Storm Water."
- B. There is no fee for the transfer of the permit. Work may not begin until all transfer permit forms are signed and dated and the contractor identifies by name a person knowledgeable and experienced in the application and implementation of the Storm Water Pollution Prevention Plan, and has developed a chain of responsibility for all operators (subcontractors) on the site, in accordance to Part III.A.1 of the General Permit.
- C. The Contractor shall be solely responsible for complying with the requirements of General Permit where Contractor is referenced in Part II.B.2: Permittee(s) for Parts II.B, II.C and IV.

The Contractor shall be responsible for providing all inspections, documentation, record keeping, maintenance, remedial actions, repairs required by the permit. All inspections, maintenance, and records required in the General Permit Part IV.E, Inspections and

Maintenance, shall be the sole responsibility of the Contractor. The word "Permitee" in these referenced paragraphs shall mean "Contractor". Standard forms for logging all required inspection and maintenance activities shall be used by the Contractor. All inspection and maintenance forms used on this Project shall be turned over to the Engineer every two weeks for retention in accordance with Part IV.E, Inspections and Maintenance of the permit.

The Contractor shall have all logs, documentation, inspection reports on site for Engineer's review and shall post the permit on site. The Contractor shall immediately rectify any shortcomings noted by the Engineer. All meetings with the MPCA, Watershed District, WMO, or any local authority shall be attended by both the Engineer and the Contractor or their representatives. No work required by said entities, and for which the Contractor would request additional compensation, shall be started without approval from the Engineer. No work required by said entities and for which the changes will impact the design or requirements of the Contract documents or impact traffic shall be started without approval from the Engineer.

The Contractor shall immediately notify the Engineer of any site visits by Local Permitting Authorities performed in accordance with Part V.H, Inspection and Entry.

- D. If the Contractor fails to perform the requirements as listed herein, the Engineer will issue a Work Order detailing the required action. The Contractor shall start the required action within twenty-four (24) hour of receipt of the Work Order and continue the required action until the Project is brought into compliance with the permit. Failure to perform the required action as specified, shall subject the Contractor to a \$1000/calendar day deduction.

The Contractor shall review and abide by the instructions contained in the permit package. The Contractor shall hold the City harmless for any fines or sanctions caused by the Contractor's actions or inactions regarding compliance with the permit or erosion control provisions of the Contract Documents.

#### **S-27 (1802) TRAINING FOR CONSTRUCTION TRUCK OPERATORS**

Operators of construction trucks hauling construction materials such as borrow, aggregate base, asphalt mixtures and concrete paving mixtures are encouraged to become certified as a Level I Construction Truck Operators (CTO).

This one-day session taught in various Mn/DOT Districts features classroom and hands-on educational experiences. The objective of the CTO Training is to make the driver aware of the Federal and State requirements and regulations regarding the construction truck and driver, and the safe driving techniques that will result in the safe operation of the construction truck. Presenters include Minnesota State Patrol, Minnesota Department of Transportation and the Minnesota Safety Center.

This training is co-sponsored by the Minnesota State Patrol, the Minnesota Highway Safety Center, the Minnesota Trucking Association, the Minnesota Asphalt Pavement Association and the Minnesota Department of Transportation.

Additional information about this certification program can be obtained by contacting any of the following:



Department of Public Works  
201 4<sup>th</sup> Street SE, Room 108  
Rochester, MN 55904-3740  
(507) 328-2400

	PHONE #	FAX #
Minnesota Asphalt Pavement Association: E-mail: <a href="mailto:info@mnapa.org">info@mnapa.org</a>	651-636-4666	651-636-4790
Minnesota Department of Transportation: E-mail: <a href="mailto:motorcarrier@state.mn.us">motorcarrier@state.mn.us</a> Website: <a href="http://www.dot.state.mn.us/cvo/index.html">http://www.dot.state.mn.us/cvo/index.html</a>	Toll Free: 1-888-472-3389 651-405-6060	651-405-6082
Minnesota Highway Safety Center: E-mail: <a href="mailto:tjsakry@stcloudstate.edu">tjsakry@stcloudstate.edu</a> Website: <a href="http://mnsafetycenter.org">http://mnsafetycenter.org</a>	Toll Free: 1-888-234-1294 320-255-4732	320-255-3942
Minnesota State Patrol: Website: <a href="http://www.dps.state.mn.us/patrol/comveh/index.htm">http://www.dps.state.mn.us/patrol/comveh/index.htm</a>	Toll Free: 1-888-472-3389 651-405-6171	651-405-6082
Minnesota Trucking Association: E-mail: <a href="mailto:john@mntruck.org">john@mntruck.org</a> Website: <a href="http://www.mntruck.org">http://www.mntruck.org</a>	651-646-7351	651-641-8995

#### **S-28 (1803) PROSECUTION OF WORK**

The provisions of Mn/DOT 1803 are supplemented and/or modified with the following:

##### **S-28.1 SPECIAL PROJECT ADA REQUIREMENTS**

All pedestrian facilities and shared trails on this Project must be constructed according to Public Rights-of-Way Accessibility Guidelines (PROWAG) which can be found at: <http://www.access-board.gov/prowag/draft.htm>. The appropriate pedestrian ramp details for each quadrant are included in the Plan. The Engineer may provide additional details to those provided in the Plan that meet the PROWAG guidelines as the need arises and field conditions dictate.

(A) The Contractor must designate a responsible person familiar with PROWAG to assess proposed sidewalk layouts at each site before work begins. This person must be on site at all times that any work concerning pedestrian facilities is being performed.

(B) Pedestrian Access Routes must be constructed meet to the following criteria:

- a maximum 2.0% cross slope
- a maximum 8.3% longitudinal slope, not to exceed 15 feet on the initial curb ramp or 30 feet on other sidewalk ramps
- landings must be a minimum 4 feet by 4 feet with a maximum 2.0% slope in all directions
- 4 foot minimum width must be continuously maintained throughout the Pedestrian Access Route
- vertical discontinuities must be less than 0.25 inches
- must provide positive drainage without allowing any ponding

If the Contractor constructs any pedestrian or shared-use trail facilities that are not as indicated on the Plan, do not meet the above requirements, or do not follow the agreed upon resolution, the Contractor will be responsible for correcting the deficient facilities with no compensation paid for the



corrective work. To ensure that the facilities are constructed to be compliant with PROWAG, the Contractor shall follow the following three steps:

- (1) The Contractor shall use the appropriate ramp details in the Plan and identify the removal limits for the sidewalk and curb and gutter. If Contractor determines the removal limits are not adequate to meet PROWAG, the Contractor shall stop work immediately and consult the Engineer to determine a resolution. Once the Engineer and the Contractor reach agreement on what is to be done, the Contractor may proceed to the next step.
- (2) The Contractor shall transition from the in-place curb type to the new curb and gutter. Prior to beginning the installation of any curb and gutter, the Contractor must verify the curb cuts:
  - (a) will be located within the crosswalk.
  - (b) will be aligned with the opposing pedestrian ramp across the roadway.
  - (c) will allow for required slopes to be met.
  - (d) will maintain existing drainage patterns as well as existing gutter inflows/outflows.

If any of these conditions cannot be met, the Contractor shall consult with the Engineer to determine a resolution. Once the Engineer and the Contractor reach agreement on what is to be done, the Contractor may proceed to the next step.

- (3) The Contractor shall verify that the required slopes and landing can be achieved after setting sidewalk forms, and prior to pouring the concrete walks. Once the Contractor has verified the required landing area, longitudinal slopes, and cross slopes can be achieved, the Contractor can complete the concrete sidewalk pour.

(C) The Contractor is reminded that all joints and edges of the walk shall be rounded with a ¼ inch radius edging tool, sawed contraction joints shall extend to at least 30 percent of walk thickness and shall be approximately 1/8 inch wide as per Mn/DOT 2521. The Contractor shall also have the option of providing saw cuts to construct the sidewalk joints. This work shall be considered incidental and no extra compensation paid.

(D) It shall be the responsibility of the Contractor to layout all proposed work at each intersection in accordance with the Plan and requirements listed in this Special Provision. The Contractor may confer with the Engineer for guidance in laying out the proposed work, but it will be the Contractor's responsibility to ensure the proposed work meets all the requirements of this Special Provision. This layout includes, but is not limited to placement of grade breaks, curb tapers, gutter flow lines, truncated dome placement, crosswalk marking placement, flares, landing limits, and ramp limits. It is very important that the Contractor layout this work properly to achieve the construction of a facility that is compliant. This work shall be incidental.

(E) All pedestrian signal systems should be installed as designed in the Plan and must be constructed to meet the following criteria. The Contractor shall verify that the proposed push button locations will meet all of the following criteria before proceeding with the installation of the pedestrian push button system:

- Pedestrian push buttons shall be oriented with the button facing towards the intersection and the button face parallel to the outside edge of the crosswalk
- Pedestrian push buttons shall be a minimum of 10 feet apart
- Pedestrian push buttons shall be a minimum of 4 feet and a maximum of 10 feet from the back of curb/edge of roadway, but may be placed 1.5 feet to 4 feet from the back of curb/edge of roadway if mounted on a signal pole as indicated in the Plan



- Pedestrian push buttons shall be located at the outside crosswalk edge and shall be no more than 5 feet offset from the outside edge of the crosswalk
- Each pedestrian push button shall have a landing immediately adjacent to the push button face with minimum dimensions of 4 feet by 4 feet and a maximum slope of 2.0% in all directions
- Crosswalks shall be striped in a straight alignment between the outside edges of the detectable warnings with no kinks

If any of these conditions cannot be met, the Contractor shall consult with the Engineer to determine a resolution. Once the Engineer and the Contractor reach an agreement on what is to be done, the Contractor may proceed. If the Contractor constructs any pedestrian push button systems which do not meet the criteria or the agreed upon resolution, the Contractor will be responsible for correcting the deficiencies with no compensation paid for the corrective work.

#### **S-29 (1806) DETERMINATION OF CONTRACT TIME**

The contract time will be determined in accordance with the provisions of 1806 and the following:

S-29.1 Construction operations shall be started within eight (8) Calendar Days after the date of Notice of Contract Approval, whichever is later. Construction operations shall not commence prior to Contract Approval.

All work required by these contract documents shall be initiated after **April 1, 2012** and completed no later than **September 30, 2012**.

For further time sensitive information please refer to the following sections of this proposal:  
(1404) MAINTENANCE OF TRAFFIC, (1707) PUBLIC SAFETY, AND (2563) TRAFFIC CONTROL

#### **S-30 INCIDENTAL WORK**

Items of work for which no pay items are included in the bid proposal shall be considered as incidental expense and no separate payment will be made therefore. Incidental items include, but are not limited to the following:

- Disposal of excess excavation.
- Temporary Raised Pavement Markers (TRPM) as required by project phasing.
- Concrete Washout Operations
- Bituminous Tack Coat.
- Reinforcing bars and dowels.
- Energy Dissipator Rings (Std 5010)
- Pipe joint ties.
- Pipe bedding/foundation/encasement material
- Adjusting Curb Box Covers
- Curb Box Covers
- Maintaining access to private property.
- Preparation of aggregate base for paving
- Shaping of earth berms for erosion control and drainage swales
- Water & Dewatering
- Finish grading of boulevard and disturbed areas

#### **S-31 (1904) EXTRA AND FORCE ACCOUNT WORK**

The provisions of Mn/DOT 1904 are supplemented and/or modified with the following:

- S-31.1 The Contractor is required to submit force account work itemized statements of costs in accordance with Mn/DOT 1904 to the Engineer on Mn/DOT form TP-21659 (Summary of Daily Force Account). Copies of this form can be obtained from the Engineer.
- S-31.2 The following sentence shall be added to the second paragraph of Mn/DOT 1904:  
"Under no circumstance will the negotiated unit price for Extra Work which is performed by a subcontractor include a Prime Contractor allowance which exceeds that provided for in 1904(4), Paragraph 3."

**S-32 (1910) FUEL ESCALATION CLAUSE**

The provisions of Mn/DOT 1910 are hereby deleted and replaced with the attached Fuel Escalation Clause.

**S-33 (2021) MOBILIZATION**

The provisions of Mn/DOT 2021 are hereby deleted and replaced with the following:

**S-33.1 DESCRIPTION**

Mobilization shall consist of preparatory work and operations, including, but not limited to, those necessary for the movement of personnel, equipment, supplies and incidentals to the Project site; for the establishment of all Contractor's offices and buildings or other facilities necessary for work on the Project. Mobilization may include bonding, permit, and demobilization costs. When the proposal does not have a lump sum item for Mobilization, all costs incurred by the Contractor for Mobilization shall be incidental to other work.

**S-33.2 BASIS OF PAYMENT**

Based on the lump sum Contract price for mobilization, partial payments will be made as follows:

Mobilization Partial Payments		
% of Original Contract Amount Completed <sup>1</sup>	Pay Lesser of the Two	
	% of Mobilization	% of Original Contract Amount
5	50	3
15	75	5
25	100	5
95	100	N/A

<sup>1</sup> The Percent of Original Contract Amount Completed = the amount earned by the Contractor, excluding money earned for mobilization and material on hand, divided by the total value of the original contract (all bid items).



The total sum of all payments shall not exceed the original Contract amount bid for the mobilization item, regardless of the fact that the Contractor may have, for any reason, shut down work on the Project or moved equipment away from the Project and then back again.

Nothing herein shall be construed to limit or preclude partial payments otherwise provided by the Contract.

<u>Item No.</u>	<u>Item</u>	<u>Unit</u>
2021.501	MOBILIZATION.....	L S

**S-34 (2041) ON-THE-JOB-TRAINING PROGRAM**

Section II. 6.b of the "Required Contract Provisions-Federal-Aid Contracts" set forth elsewhere in this Proposal is deleted and the following substituted therefore:

As part of the Contractor's equal employment opportunity affirmative action program, training shall be provided as follows:

The Contractor shall provide on-the-job training aimed at developing full journeyman in the type of trade involved. **THE NUMBER OF HOURS OF TRAINING TO BE FULFILLED UNDER THIS CONTRACT WILL BE 500 ; UTILIZING AT LEAST 1 TRAINEES.** In the event the Contractor subcontracts a portion of the Contract work, he/she shall determine how much of the training requirement will be fulfilled by the subcontractor, provided, however, that the Contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. This Contractor shall insure that these provisions are made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

The number of trainees shall be distributed among the work classifications on (1) the basis of the Contractor's needs and (2) the availability of journeymen in the various classifications within a reasonable area of recruitment. The contractor must complete all sections of the "On-the-Job Training (OJT) Program Approval Form" The form should be submitted to Mn/DOT's Office of Civil Rights within ten (10) days of Contract Award and must be received no later than at the time of the pre-construction conference to the Project Engineer. The Form can be found in the attached Equal Employment Opportunity (EEO) Special Provisions on EEO Page 25, and on the Mn/DOT Office of Civil Rights website - <http://www.dot.state.mn.us/civilrights/documents/OJTPre-ConstructionForm.pdf>. The Contractor will be credited for each trainee who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees as provided hereinafter.

THE COMPLETED FORM **MUST** BE SUBMITTED TO MN/DOT NO LATER THAN AT THE TIME OF THE PRE-CONSTRUCTION CONFERENCE. The Contractor may use one of the following means to submit their completed On-the-Job Training (OJT) Program Approval Form.

- a) Mail the form to Mn/DOT Office of Civil Rights 395 John Ireland Blvd. MS 170 Saint Paul, MN 55155
- b) The form may be faxed to Christian Guerrero at 651-366-3129.

A CONTRACTOR WHO IS APPROVED AND ACCEPTED INTO MN/DOT'S ON-THE-JOB TRAINING (OJT) ALTERNATIVE PROGRAM WILL SUBMIT THEIR TRAINING PLAN WITHIN THE TIMEFRAMES SPECIFIED BY THAT PROGRAM AND THEREFORE WILL NOT BE REQUIRED TO SUBMIT THE "ON-THE-JOB TRAINING (OJT) PROGRAM APPROVAL FORM" WITHIN TEN (10) DAYS OF CONTRACT AWARD OR AT THE TIME OF THE PRE-CONSTRUCTION CONFERENCE. The trainees that have been approved as part of their Contractor – based assignment of positions, must be utilized in accordance with the following provisions set forth here.

Training and upgrading of minorities and women toward journeyman status is a primary objective of these requirements. Accordingly, the Contractor shall make every effort to enroll minority trainees and women (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent such persons are available within a reasonable area of recruitment. The Contractor will be responsible for demonstrating the steps that he/she has taken in pursuance thereof, prior to a determination as to whether the Contractor is in compliance with these requirements. This training commitment is not intended and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employees shall be employed as a trainee in any classification in which he/she has successfully (1) completed a training course leading to journeyman status or (2) in which he/she has been employed as a journeyman. The Contractor shall satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, the Contractor's records shall document the findings in each case.

**The Contractor should also note the following in regards to qualification of candidates to meet the OJT requirements:**

1. All apprentices that are officially registered in one of the approved training programs listed below are eligible to be accepted as a OJT candidates as long as they have not worked more hours than the stated number of hours of their crafts apprenticeship program.
2. Movement of approved trainees from project to project or from contractor to contractor is allowed for OJT credit, if that practice is not determined to constitute a practice of "bicycling" and/or result in a disproportionate adverse effect upon minority and women apprentice members or trainees. Bicycling – is the transfer of minority or female employees or trainees from contractor to contractor and/or from project to project for the sole purpose of meeting the Contractor's goals. "Bicycling" shall be a violation of this Special Provision and the regulations in 41 CFR Part 60-4.

The minimum length and type of training for each classification will be as established on the "On-the-Job Training (OJT) Program Approval Form" submitted by the Contractor and approved by the State Transportation Department and the Federal Highway Administration. The State Transportation Department and the Federal Highway Administration will approve a program if it is reasonably calculated to meet the equal employment opportunity obligations of the Contractor and will qualify the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved but not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligations of Federal-aid highway construction contracts. .

Examples of approved training programs are not limited to but include the following:

- MN Construction Laborers Apprenticeship Program
- Local 49 Operating Engineers Apprenticeship Training Program
- North Central States Regional Council of Carpenters Training Program
- Iron Workers Apprenticeship Program
- MN Teamsters Construction Apprenticeship Training Program
- MN Cement Masons Apprenticeship Training Program
- Painters and Allied Trades District Council 82 Finishing Trades Apprenticeship Program
- MN Electricians Union Apprenticeship Programs.



Any training program proposed by a contractor to meet the obligations set forth in this Provision which is not included in the list of approved programs cited above will be subject to approval by Mn/DOT's Office of Civil Rights, and must include a minimum of 500 training hours but shall not exceed 2,000 hours. If a contractor proposes to utilize an approved apprenticeship program from one of the examples cited above, the contractor must provide the Apprenticeship Form or Indenture Number when submitting for approval. The Contractor shall also furnish to Mn/DOT's Office of Civil Rights a list of currently employed apprentices in each trade they wish to utilize. The list must include: Name, Gender, Ethnicity and current year of apprenticeship. The number of hours an approved trainee who is enrolled in a certified apprenticeship program can retain eligibility for trainee status will be consistent with the amount of hours that have been established as the minimum requirement necessary to be completed prior to achieving journey level status.

Approval or acceptance of a training program shall be obtained from Mn/DOT's Office of Civil Rights prior to any work by the classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather than clerk-typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Any and all training provided by a contractor to meet the obligations in this Provision must provide a significant and meaningful training experience for the trainee candidate. Some offsite training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Except as noted below, the Contractor will be reimbursed at the appropriate Contract price per hour for each employee that is trained in accordance with, and for at least the minimum period specified in the approved training program. As approved by the Engineer, reimbursement will be made for training persons in excess of the number specified herein. This reimbursement will be made even though the Contractor receives additional training program funds from other sources, provided such other source does not specifically prohibit the Contractor from receiving other reimbursement. Reimbursement for offsite training indicated above may only be made to the Contractor where he/she does one or more of the following and the trainees are concurrently employed on a Federal-aid project; (1) contributes to the cost of the training, (2) provides the instruction to the trainee or (3) pays the trainee's wages during the offsite training period.

No payment shall be made to the Contractor if either the failure to provide the required training, or the failure to hire the trainee as a journeyman, is caused by the Contractor and evidences a lack of good faith on the part of the Contractor in meeting the requirements of this Special Provision. It is normally expected that a trainee will begin his/her training on the Project as soon as feasible after start of work utilizing the skill involved, and remain on the Project as long as training opportunities exist in his/her work classification or until he/she has completed his/her training program. It is not required that all trainees be on board for the entire length of the Contract. If a contractor lays off or terminates a trainee for any reason, that contractor must complete and submit the "Trainee Termination Form" which can be found in the EEO Special Provisions. A Contractor will have fulfilled his/her responsibilities under this special provision if he/she has provided a significant, meaningful training experience and/or acceptable training to the number of trainees specified. The number trained shall be determined on the basis of the total number enrolled on the Contract for a significant period.

Trainees will be paid at least 60 percent of the appropriate minimum journeyman's rate specified in the Contract for the first half of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period, unless apprentices or trainees in an approved existing program are enrolled as trainees on this Project. In that case, the appropriate rates approved by the Departments of Labor or Transportation in connection with the existing program shall apply to all trainees being trained for the same classification who are covered by this Special Provision.

The Contractor shall furnish the trainee a copy of the program he/she will follow in providing the training. The Contractor shall provide each trainee with a certification showing the type and length of training satisfactorily completed.

The Contractor shall provide for the maintenance of records and furnish periodic reports documenting his/her performance under these Special Provisions. Any trainee that has been approved by the Office of Civil Rights and employed by the Contractor, and subsequently terminated must be documented on the "On-the-Job Training Trainee Termination Form" located in the EEO Special Provisions of this Contract on EEO Page 26. All required forms needed to satisfy the requirements of these Special Provisions can be found in the attached EEO Special Provisions, pages 23-26 or on the Mn/DOT Office of Civil Rights website - <http://www.dot.state.mn.us/civilrights/>.

Compliance with the foregoing requirements for timely filing of the reports may be a condition precedent to the processing and payment of partial and final payments. If it is determined that a contractor has not acted in "Good Faith" with efforts to comply with this provision or engages in willful violations, a contractor may be subject to sanctions including but not limited to: monetary deductions associated with the trainee line item in the contract, withholding of partial and/or final payment.

The trainee period will be measured by time in hours as specified hereinbefore, and payment will be made under Item 2041.610 (Trainees). This item will be shown on the Bid Schedule at the fixed rate amount of \$1.00 per hour.

With appropriate documentation, an additional \$4.00 per hour (maximum total of \$5.00 per hour) will be paid to the Contractor for hours worked on the project by employees recruited from Mn/DOT's OJT Supportive Services Programs. In conjunction with any employees recruited from Mn/DOT's OJT Supportive Services Programs, an additional \$5.00 per hour (maximum total of \$10.00 per hour) will be paid to the Contractor for hours worked on the project by employees recruited from Mn/DOT's OJT Supportive Services Programs, if the Contractor provides a mentor for the trainee(s) while the trainee(s) is working on the project. Approval for payments to be made under Item 2041.610 (Trainees) for any amount which exceeds the fixed rate amount of \$1.00 must be received in writing from the Mn/DOT Office of Civil Rights. The ratio of trainee to mentor may not exceed 3 to 1. A listing of Mn/DOT's OJT Supportive Services Programs can be found on the Office of Civil Rights website cited above.

<u>Item No.</u>	<u>Item</u>	<u>Unit</u>
2041.610	TRAINEES.....	HOUR

**S-35 (2101) CLEARING AND GRUBBING**

Clearing and grubbing operations shall be performed in accordance with the provisions of Mn/DOT 2101 and the following:

S-35.1 **Burning or burying timber, stumps, roots or other debris will not be permitted.**

S-35.2 The first paragraph of Mn/DOT 2101.3D Disposal Limitations, is revised to read as follows:

The Contractor shall dispose of trees, brush, stumps, roots, and other debris or byproducts by chipping, marketing, or burning. The Contractor:

S-35.3 Mn/DOT 2101.3D(5) under Disposal Limitations, is revised to read as follows:

(5) Shall not bury trees, brush, stumps, roots, and other debris or by-products within the State Right of Way or City Property.



S-35.4 Mn/DOT 2101.3D6 Burying, is hereby deleted in its entirety.

S-35.5 The first paragraph of Mn/DOT 2101.4B Area Basis, is revised to read as follows:

When the hectare is the unit, quantities will be determined by measuring (to the nearest 0.02 hectare (**0.05 acre**)) all areas cleared and all areas grubbed, within the limits shown in the Plans or staked by the Engineer. All measurements will be made horizontally to points 3 m (**10 feet**) outside the trunks of qualifying trees or stumps on the perimeter of the area being measured. Separate areas smaller than 0.02 hectare (**0.05 acre**) will be considered to be 0.02 hectare (**0.05 acre**).

S-35.6 The first paragraph of Mn/DOT 2101.5 Basis of Payment, is revised to read as follows:

Payment for the accepted quantities of clearing and grubbing at the Contract prices per unit of measure will be full compensation for all removal and disposal costs, including the costs of securing outside disposal sites as needed and of carrying out the specified treatment in disposing of elm, oak wilt infected red oaks, pine, and marketable trees.

<u>Item No.</u>	<u>Item</u>	<u>Unit</u>
2101.501	CLEARING.....	ACRE
2101.502	CLEARING.....	TREE
2101.506	GRUBBING.....	ACRE
2101.507	GRUBBING.....	TREE

**S-36 (2104) REMOVING PAVEMENT AND MISCELLANEOUS STRUCTURES**

Abandoned structures and other obstructions shall be removed from the Right of Way and disposed of in accordance with the provisions of Mn/DOT 2104, except as modified below:

Measurement and payment for the removal and disposal of materials will be made only for those Items of removal work specifically included for payment as such in the Proposal and as listed in the Plans.

The removal of any unforeseen obstruction requiring in the opinion of the Engineer equipment or handling substantially different from that employed in excavation operations, will be paid for as Extra Work as provided in Mn/DOT 1403.

The Owner shall have the option of removing and salvaging all items such as mailboxes, fences, gates, light standards, poles, etc. If the Owner does not remove such items prior to construction, they shall be removed by the Contractor and shall be considered incidental to the Contract unless specific bid items are included.

All debris and excess materials removed from the project shall be disposed of by the Contractor off the project site. No burying of debris will be permitted.

Removal of any structures or items for which no specific pay item is provided in the Contract shall be incidental to the Contract and no direct compensation will be made therefore.

Sewers within the trenching limits shall be removed and sewers outside of the trench limits shall be plugged all as incidental expense.

Abandoning of existing storm sewers shall be filled with granular material and capped watertight. Filling and capping of the abandoned sewer pipe shall be considered incidental work for which no direct payment will be made.

S-36.1 **Item 2104.501 "Remove Concrete Curb and Gutter"** Shall include the removal of existing curb and gutter as noted on the plans. Measurement and payment shall be made at the contract unit price per linear foot, which shall be compensation in full for all labor,



- equipment, and materials necessary to remove and dispose of the concrete curb and gutter including full depth saw cut to provide a clean edge.
- S-36.2     **Item 2104.501 “Remove Retaining Wall”** Shall include the removal of existing wall as noted on the plans. Measurement and payment shall be made at the contract unit price per linear foot, which shall be compensation in full for all labor, equipment, and materials necessary to remove and dispose of the wall.
- S-36.3     **Item 2104.501 “Remove Sewer ...”** If no pay item is included then it is incidental to the project otherwise, shall include the removal of existing pipe, apron, or structure, by type, as noted on the plans. Measurement and payment shall be made at the contract unit price per linear foot or each, which shall be compensation in full for all labor, equipment, and materials necessary to remove and dispose of the work.
- S-36.4     **Item 2104.505 “Remove Concrete Pavement, Drive, and Sidewalk”** Shall include the removal of existing concrete pavements as noted on the plans. Measurement and payment shall be made based on surface area and shall be compensation for the total depth of the concrete pavements at the contract unit price per square yard, which shall be compensation in full for all labor, equipment, and materials necessary to remove and dispose of the concrete pavements.
- S-36.5     **Item 2104.505 “Remove Bituminous Pavement”** Shall include the removal of existing bituminous pavement as noted on the plans. Measurement and payment shall be made based on surface area and shall be compensation for the total depth of the bituminous pavement at the contract unit price per square yard, which shall be compensation in full for all labor, equipment, and materials necessary to remove and dispose of the bituminous pavement.
- S-36.6     **Item 2104.509 “Remove Concrete Headwall”** Shall include the removal of the existing Concrete Headwall and rail as noted on the plans. Measurement and payment shall be made at the contract unit price per each, which shall be compensation in full for all labor, equipment, and materials necessary to protect the existing structures, remove and dispose the entire headwall and rail.
- S-36.7     **Item 2104.509 “Remove Manhole and Catch Basin”** Shall include the removal of the existing storm or sanitary manholes and basins as noted on the plans. Measurement and payment shall be made at the contract unit price per each, which shall be compensation in full for all labor, equipment, and materials necessary to maintain service flow, plug, remove and dispose the entire structure.
- S-36.8     **Item 2104.509 “Remove Hydrant”** Shall include the removal of the existing hydrant as noted on the plans. If directed by the Engineer, all removed hydrants shall be delivered to Rochester Public Utilities at 4000 East River Road NE in Rochester, MN. Otherwise contractor shall dispose of hydrant at their expense. Measurement and payment shall be made at the contract unit price per each, which shall be compensation in full for all labor, equipment, and materials necessary remove and dispose the entire structure.
- S-36.9     **Item 2104.511 “Sawing Concrete Pavement”** If no pay item is included then it is incidental to the project otherwise, shall include saw cutting of concrete paving along the removal line. Measurement and payment shall be made at the contract unit price per linear foot, which shall be compensation in full for all labor, equipment, and materials necessary to saw cut to provide a clean edge.
- S-36.10    **Item 2104.513 “Sawing Bituminous Pavement”** If no pay item is included then it is incidental to the project otherwise, shall include saw cutting of bituminous paving along the



removal line. Measurement and payment shall be made at the contract unit price per linear foot, which shall be compensation in full for all labor, equipment, and materials necessary to saw cut to provide a clean edge.

S-36.11 **Item 2104.602 "Relocate Commercial Sign"** Shall include the existing commercial sign, at approximately Station 22+75 left. Measurement and payment shall be made at the contract unit price per each, which shall be compensation in full to conduct work in compliance with the railroad right of way, remove the entire large existing concrete foundation, salvage sign and lighting, including bases and conduit, and any other items necessary to relocate and reconstruct the sign within 30ft of the existing location, as directed by the Engineer. Any damage to the signs shall be repaired or replaced at the expense of the Contractor.

S-36.12 **Measurement and payment** for the removal and disposal of materials will be made only for those Items of removal work specifically included for payment as such in the Proposal and as listed in the Plans. The removal of any unforeseen obstruction requiring in the opinion of the Engineer equipment or handling substantially different from that employed in excavation operations, will be paid for as Extra Work as provided in Mn/DOT 1403.

<u>Item No.</u>	<u>Item</u>	<u>Unit</u>
2104.501	REMOVE CURB AND GUTTER.....	L F
2104.503	REMOVE CONCRETE DRIVEWAY PAVEMENT .....	S F
2104.505	REMOVE BITUMINOUS DRIVEWAY PAVEMENT .....	S Y
2104.505	REMOVE BITUMINOUS PAVEMENT (P) .....	S Y
2104.511	SAWING CONCRETE PAVEMENT (FULL DEPTH) .....	L F
2104.513	SAWING BIT PAVEMENT (FULL DEPTH).....	L F
2104.523	SALVAGE SIGN TYPE C.....	EACH
2104.503	REMOVE BITUMINOUS WALK .....	S F
2104.503	REMOVE CONCRETE SIDEWALK .....	S F
2104.501	REMOVE SEWER PIPE (STORM) .....	L F
2104.501	REMOVE CONCRETE BOX CULVERT.....	L F
2104.509	REMOVE PIPE APRON.....	EACH
2104.509	REMOVE CONCRETE HEADWALL .....	EACH
2104.509	REMOVE MANHOLE OR CATCH BASIN .....	EACH
2104.523	SALVAGE PIPE APRON.....	EACH

### **S-37 (2105) EXCAVATION AND EMBANKMENT**

Roadway excavation and embankment construction shall be performed in accordance with the provisions of Mn/DOT 2105, except as modified below:

S-37.1 Dewatering shall be considered an incidental expense and included in the price bid for other items.

S-37.2 Mn/DOT 2105.2A2 Rock Excavation is revised to read as follows:

Rock excavation shall consist of all materials that cannot, in the Engineer's opinion, be excavated without drilling and blasting or without the use of rippers, together with all boulders and other detached rock each having a volume of 1 cubic meter (**1 cubic yard**) or more, but exclusive of those quantities that are to be paid for separately under the item of rock channel excavation.

- S-37.3 The last paragraph in Mn/DOT 2105.3B Preparation of Embankment Foundation, is revised to read as follows:  
Before backfilling depressions within the roadway caused by the removal of foundations, basements, and other structures, the Contractor shall enlarge the depressions as directed by the Engineer.
- S-37.4 The first and second sentences in the second paragraph in Mn/DOT 2105.3D Disposition of Excavated Material are revised to read as follows:  
When the soils are so varied that selection and placement of uniform soils is not practical, the Contractor shall use disks, plows, graders or other equipment to blend and mix suitable soils to produce a uniform soil texture, moisture content and density; except that, all soils that contain 20 percent or more particles passing the 75  $\mu$ m (#200) sieve shall be blended, mixed and dried with a disk, within the entire upper 2 meters (**6 feet**) of embankment. The disk shall meet the requirements of 2123 N, Disk Harrow. A disk is also to be used below the upper 2 meters (**6 feet**) of the embankment fill area, if in the opinion of the Engineer, the Contractor is not producing a uniform soil texture.
- S-37.5 The fifth paragraph in Mn/DOT 2105.3D Disposition of Excavated Material, is revised to read as follows:  
Peat, muskeg, and other unstable materials that are not to be used in the roadbed embankments shall be deposited in the areas indicated in the Plans or elsewhere as approved by the Engineer. All other material that is considered unsuitable for use in the upper portion of the roadbed shall be placed outside of a 1:1 slope down and outward from the shoulder lines on fills under 10 m (**30 feet**) in height or outside of a 1 vertical to 1.5 horizontal slope down and outward from shoulder lines on fills over 10 m (**30 feet**) in height, or used to flatten the embankment slopes, or disposed of elsewhere as approved by the Engineer
- S-37.6 The second sentence in the eighth paragraph of Mn/DOT 2105.3D Disposition of Excavated Material, is revised to read as follows:  
No stones exceeding 150 mm (**6 inches**) in greatest dimension will be permitted in the upper 1 m (**3 feet**) of the roadbed embankment
- S-37.7 The fourth to last paragraph in Mn/DOT 2105.3D Disposition of Excavated Material, which begins with "All combustible debris materials (stumps, roots, logs, brush, etc.) together with all..." is hereby deleted and replaced with the following:  
All noncombustible materials other than soils (oversized rock, broken concrete, metals, plastic pipe, etc.) shall be disposed of in accordance with 2104.3C.
- S-37.8 The Contractor shall be responsible for disposing of all excess excavation materials, and located a suitable site for disposal.
- S-37.9 The ninth paragraph of Mn/DOT 2105.5 is hereby deleted and replaced with the following:  
If the Proposal fails to include a bid item for rock excavation or rock channel excavation, and material is uncovered that is so classified, excavation of the rock will be paid for separately at the Contract price for common excavation or common channel excavation, plus an additional \$26.00 per cubic meter (**\$20.00 per cubic yard**) . If no bid item is provided for common channel excavation, excavation of materials classified as rock channel excavation will be paid for at the Contract price for common excavation plus an additional \$28.00 per cubic meter (**\$21.50 per cubic yard**). Such stipulated prices for rock excavation will apply up to a maximum of 200 m<sup>3</sup> (**260 cubic yards**) of excavation per item or to such quantity as may be performed by mutual consent prior to execution of an Extra Work agreement.
- S-37.10 The twelfth paragraph of Mn/DOT 2105.5 is hereby deleted and replaced with the following:



- (a) That portion of the additional excavation that is removed from below a plane parallel to and 5 m (**15 feet**) below the natural ground surface will be measured in 2 m (**5 foot**) depth zone increments and paid for separately at adjusted unit prices. The adjusted unit price will be equal to the Contract bid price for muck excavation plus \$0.39 per cubic meter (**\$0.30 per cubic yard**) for the additional excavation within the 5-7 m (**15-20 foot**) depth zone and an additional \$0.26 per cubic meter (**\$0.20 per cubic yard**) for each additional 2 m (**5 foot**) increment of depth beyond 7 m (**20 feet**)..

S-37.11 Compaction of all embankment construction, including culvert backfills, shall be obtained by the "**Quality Compaction**" method described in Mn/DOT 2105.3F

The upper 6" below subgrade excavations shall be compacted in accordance with Mn/DOT Standard Specification 2112. The Quality Compaction Method shall be used. Any soft or unstable areas should be removed and replaced with approved fill materials and recompacted. Additional excavation will be paid as common excavation.

Test Rolling shall not be required on this Project.

S-37.12 Bidders are advised that Mn/DOT 2105.5 regarding Muck Excavation is modified to the extent that No separate classification shall exist for muck excavation. Muck excavation if encountered shall be classified as Common Excavation.

S-37.13 Measurement and Payment

<u>Item No.</u>	<u>Item</u>	<u>Unit</u>
2105.501	COMMON EXCAVATION (P).....	C Y

#### **S-38 (2105) COMMON CHANNEL EXCAVATION**

The provisions of Mn/DOT 2105 are modified and/or supplemented with the following:

Common Channel Excavation has been included to excavate/re-grade to drain the ditch channels as shown on the plans. Measurement and payment shall be made at the contract unit price per cubic yard, which shall be compensation in full for all labor, equipment, and materials necessary to complete the work.

The Contractor shall maintain all excavations and embankments in a well drained condition at all times. The Contractor shall install planned drainage facilities concurrently with the embankment construction, temporarily crown grades to minimize infiltration, and install temporary drainage facilities as directed by the Engineer. No material shall be stockpiled in a manner that will restrict surface drainage.

If the Contractor interrupts existing surface drainage, sewers, or subsurface drainage, the Contractor shall, at no expense to the Department, provide and maintain temporary drainage facilities as approved by the Engineer until permanent facilities are completed and operative.

S-38.1 Basis of Payment:

Payment for channel excavation and embankment construction will be made on the basis of the following schedule:

<u>Item No.</u>	<u>Item</u>	<u>Unit</u>
2105.511	COMMON CHANNEL EXCAVATION (P).....	C Y

#### **S-39 (2105) (3877) TOPSOIL BORROW**

Topsoil Borrow shall be in accordance with the provisions of 2105 and 3138 except as follows:

Acceptance requirements will be based on the approval of the Engineer, and not by Table 3877-1 or 3877-2.

<u>Item No.</u>	<u>Item</u>	<u>Unit</u>
2105.525	TOPSOIL BORROW (LV) (P) .....	C Y

**S-40 (2123) EQUIPMENT RENTAL**

The provisions of 2123 are modified and/or supplemented with the following:

S-40.1 The following is added to Mn/DOT 2123.3 SPECIFIC REQUIREMENTS:

**N Disk Harrow**

The disk harrow shall be of sufficient size and mass to manipulate the soils to a depth of approximately 300 mm **[12 inches]** and shall meet the approval of the Engineer.

S-40.2 The following is added to Mn/DOT 2123.5 BASIS OF PAYMENT:

<u>Item No.</u>	<u>Item</u>	<u>Unit</u>
2123.610	Disk Harrow .....	hour

**S-41 (2211) AGGREGATE BASE**

Aggregate base courses shall be constructed in accordance with the provisions of Mn/DOT 2211 except as modified below:

S-41.1 Compaction shall be achieved by the **"Quality Compaction Method"** described in Mn/DOT 2211.3C.

S-41.2 The second sentence in Mn/DOT 2211.1 Description, is revised to read as follows:

The aggregate base shall be produced and placed under the Contractor's quality control program in accordance with the Mn/DOT Grading and Base Manual.

S-41.3 The last paragraph in Mn/DOT 2211. 3C2 Quality Compaction Method, is revised to read as follows:

The Engineer may elect to perform density tests as shown in the Mn/DOT Grading and Base Manual, as needed to assist inspection. The actual density obtained by testing the aggregate base must meet or exceed the requirements shown in 2211.3C1 Specified Density or 2211.3C3 Penetration Index Method in order to be acceptable.

S-41.4 The first sentence in Mn/DOT 2211.3F1 Gradation Control, is revised to read as follows:

The Contractor and/or aggregate producer shall be responsible for maintaining a gradation control program in accordance with the random sampling acceptance method described in the Mn/DOT Grading and Base Manual.

S-41.5 Mn/DOT 2211.3F2(d) under Acceptance Testing is hereby deleted and replaced with the following:

(d) Samples for gradation testing will be taken randomly by the Engineer prior to compaction, in accordance with the random sampling method described in the Grading and Base Manual.

S-41.6 Mn/DOT 2211.3F2(j) under Acceptance Testing, is revised to read as follows:

(j) One gradation sample will be taken from each subplot and tested. Payment will be based on the average results from the four subplot samples for each specified sieve.

S-41.7 The third paragraph after Mn/DOT 2211.3F2(k) under Acceptance Testing, is revised to read as follows:

A 5% price reduction will be assessed to both individual or averaged test lots for each test result that fails to meet specified gradations for sieve sizes not listed in Tables 2211-B and 2211-C by more than 2%. These price reductions are cumulative and shall be analyzed both separately and averaged by lot when applicable.



S-41.8 Table 2211-B in Mn/DOT 2211.3F2 Acceptance Testing, is hereby deleted and replaced with the following:

**Table 2211-B**  
**AGGREGATE BASE PAYMENT SCHEDULE**  
**(4 Sublots/4 Samples)**

% Passing Outside Specified Limits*		
4.75 mm (#4), 2.00 mm (#10), and 425 µm (# 40) Sieves	75 µm (#200) Sieve	Acceptance Schedule (Price Reduction)
1	0.1	5%
-----	0.2	6%
-----	0.3	9%
-----	0.4	11%
-----	0.5	14%
2	0.6	15%
> 2	> 0.6	Corrective Action
<p>*Based on average of 4 tests Price reductions for more than one failing sieve size shall be cumulative. The compensation due to the Contractor for the quantity of material represented by the failing test results shall be reduced by the sum of the respective percentages. The contractor does not have the option of taking a price reduction in lieu of complying with the Specifications.</p>		

S-41.9 The following is added to Table 2211-C in Mn/DOT 2211.3F2 Acceptance Testing:  
Substantial compliance will be applied to no more than one test failure. Substantial compliance will be eliminated when two or more test failures occur and test failures meeting substantial compliance will be subject to the next higher price reduction. One sieve failure = one test failure. Test failures for each material type will be treated separately.

S-41.10 The following is added to Table 2211-D in Mn/DOT 2211.3F2 Acceptance Testing:  
Substantial compliance will be applied to no more than one test failure. Substantial compliance will be eliminated when two or more test failures occur and test failures meeting substantial compliance will be subject to the next higher price reduction. Test failures for each material type will be treated separately.

<u>Item No.</u>	<u>Item</u>	<u>Unit</u>
2211.503	AGGREGATE BASE (CV) CLASS 5 (P).....	C Y

**S-42 (2357) BITUMINOUS MATERIAL FOR TACK**

This work shall consist of providing a uniform tack coat of bituminous material between pavement courses, in accordance with the provisions of Mn/DOT 2357 and the following:

- S-42.1 Bituminous Material for Tack shall consist of emulsified asphalt, meeting Mn/DOT 3151 for CSS-1, or CSS-1H shall not be toxic to plant life, and shall be applied between all bituminous courses and concrete surface edges.
- S-42.2 The tack coat shall be applied at a uniform rate of 0.03 to 0.05 Gal/sq yd between bituminous layers and 0.07 to 0.10 Gal/sq yd on milled bituminous surfaces prior to being overlaid.
- S-42.3 Water may be added up to 25 percent by volume to the asphalt emulsion as provided for in Mn/DOT 2357.3D. However, added water will be excluded from the application rate.
- S-42.4 Payment

All furnishing and applying bituminous material for tack required under this Contract shall be performed as incidental work for which no direct payment will be made.

**S-43 (2360) PLANT MIXED ASPHALT PAVEMENT**

Mn/DOT 2360 is hereby deleted from the Mn/DOT Standard Specifications and replaced with the attached **2360 (Plant Mixed Asphalt Pavement) Specification**:

- S-43.1 Mix Designation Numbers for the bituminous mixtures on this Project are as follows:  
Roadways:  
TYPE SP 9.5 WEARING COURSE MIX (3,C) SP WE A 3 40 C  
TYPE SP 12.5 NON WEAR COURSE MIX (3,B) SP NW B 3 30 B  
Trails and Driveways:  
TYPE SP 9.5 WEARING COURSE MIX (2,B) SP WE A 2 30 B  
TYPE SP 12.5 NON WEAR COURSE MIX (2,B) SP NW B 2 30 B
- S-43.2 The sentence "In addition to the list the above pavement surface must meet requirements of 2399 (Pavement Surface Smoothness) requirements." is deleted from **2360.3.E Surface Requirements** of the attached **2360 (Plant Mixed Asphalt Pavement) Specification**. Pavement smoothness requirements in Section S-2399 (PAVEMENT SURFACE SMOOTHNESS) of these Special Provisions will not apply on this Project.
- S-43.3 The first paragraph of **2360.3.D.1** of the attached **2360 (Plant Mixed Asphalt Pavement) Specification** is hereby deleted and replaced with the following:  
**D.1 Maximum Density**  
Compact the pavement to at least the minimum required maximum density values in accordance with Table 2360-19, "Required Minimum Lot Density (Mat)".
- S-43.4 **Table 2360-20 Longitudinal Joint Density Requirement** of the attached **2360 (Plant Mixed Asphalt Pavement) Specification** is hereby deleted.
- S-43.5 **2360.3.D.1.h Mat Density Cores** of the attached **2360 (Plant Mixed Asphalt Pavement) Specification** is hereby deleted and replaced with the following:  
**D.1.h Mat Density Cores**  
Obtain four cores in each lot. Take two cores from random locations as directed by the Engineer. Take the third and fourth cores, the companion cores, within 1 ft [0.3 m] longitudinally from the first two cores. Submit the companion cores to the Engineer immediately after coring and sawing. If the random core location falls on an unsupported joint, at the time of compaction, (the edge of the mat being placed does not butt up against another mat, pavement surface, etc.) cut the core with the outer edge of the core barrel 0.3 meters [**1 foot**] away (laterally) from the edge of the top of the mat



(joint). If the random core location falls on a confined joint (edge of the mat being placed butts up against another mat, pavement surface, curb and gutter, or fixed face), cut with the outer edge of the core barrel 150 mm  $\pm$  12.5 mm [**6 inches  $\pm$  0.5 inch**] from the edge of the top of the mat (ex. center of 100 mm [**4 inch**] core barrel 200 mm  $\pm$  12.5 mm [**8  $\pm$  0.5 inches**] from the edge of the top of the mat). Cores will not be taken within 300 mm [**1 foot**] of any unsupported edge. The Contractor is responsible for maintaining traffic, coring, patching the core holes, and sawing the cores to the paved lift thickness before density testing.

The Engineer may require additional density lots to isolate areas affected by equipment malfunction, heavy rain, or other factors affecting normal compaction operations.

- S-43.6 **2360.3.D.1.j Companion Core Testing** of the attached **2360 (Plant Mixed Asphalt Pavement) Specification** is hereby deleted and replaced with the following:

The Department will select at least one of the two companion cores per lot to test for verification.

- S-43.7 **2360.3.D.1.n Longitudinal Joint Density** of the attached **2360 (Plant Mixed Asphalt Pavement) Specification** is hereby deleted.

- S-43.8 **2360.3.D.1.p Shoulders** of the attached **2360 (Plant Mixed Asphalt Pavement) Specification** is hereby deleted.

- S-43.9 **Table 2360-24 Payment Schedule for Longitudinal Joint Density (SP Wear and SP Shoulders, 4% Void)** of the attached **2360 (Plant Mixed Asphalt Pavement) Specification** is hereby deleted.

- S-43.10 **Table 2360-25 Payment Schedule for Longitudinal Joint Density (SP Non-wear and SP Shoulders, 3% Void)** of the attached **2360 (Plant Mixed Asphalt Pavement) Specification** is hereby deleted.

- S-43.11 **2360.3.D.1.r Pay Factor Determination** of the attached **2360 (Plant Mixed Asphalt Pavement) Specification** is hereby deleted.

- S-43.12 **Basis of Payment**

Payment for the accepted quantities of asphalt mixture used in each course at the Contract prices per unit of material shall be compensation in full for all costs of constructing the asphalt surfacing as specified, including the costs of furnishing and incorporating any asphalt binder, mineral filler, hydrated lime, or anti-stripping additives that may be permitted or required.

Apply reduced payment only when mixture includes steel slag as one of the aggregate proportions. If the production Marshall lab density at the recommended or established asphalt content is in excess of 2565 kg/m<sup>3</sup> [**160 pounds per cubic foot**], payment for mixture will be calculated at the following percent of the Contracted unit price.

$$\% \text{ Payment} = \{100 - [(100 \times (\text{production density at design gyrations} - 2565)) / 2565]\}$$

$$\% \text{ Payment} = \{100 - [(100 \times (\text{production density at design gyrations} - 160)) / 160]\} \text{ ENGLISH}$$

In the absence of Contract items covering shoulder surfacing and other special construction, the accepted quantities of material used for these purposes will be included for payment with the wearing course materials.

The Contractor is responsible to complete yield checks and monitor thickness determinations so that the constructed dimensions correspond with the required Plan dimensions throughout the entire length of the Project. The tolerances for lift thickness shown in 2360.7A and B, Thickness and Surface Smoothness Requirement is for occasional variations and not for continuous over-running or under-running, unless ordered or Authorized by the Engineer.

Payment for plant mixed asphalt surface will be made on the basis of the following schedule:



<u>Item No.</u>	<u>Item</u>	<u>Unit</u>
2360.501	TYPE SP 9.5 WEARING COURSE MIX (3,C) .....	TON
2360.502	TYPE SP 12.5 NON WEAR COURSE MIX (3,B) .....	TON

**S-44 (2461) STRUCTURAL CONCRETE**

The provisions of Mn/DOT 2461 are modified in accordance with the following:

S-44.1 Mn/DOT 2461.3B shall be deleted and replaced with the following:

**B Classification of Concrete**

The Department will classify concrete by type, grade, consistency, and aggregate size. Refer to the mix number and Table 2461-2 to determine the mix requirements for each item of work.

Table 2461-2 Mix Number Identification				
First Digit	Second Digit	Third Digit	Fourth Digit	Additional Digits
Type	Grade	Slump range	Coarse aggregate gradation range	Class A coarse aggregate when required, modified mix designation, or both

Refer to individual Contract items in the Standard Specification for Mix Numbers. Deviations from the specified Mix Numbers require coordination with the Concrete Engineer.

If the Contract does not show a concrete mix number, provide Type 3, Grade Y concrete with a slump and aggregate gradation according to the Engineer.

The Department will designate grout by type and grade followed by the word "GROUT." Do not provide grout containing coarse aggregate. If the Plans do not show a type or grade for grout, provide 3A GROUT.

**B1 Type Designation**

Provide Type 1 or Type 3 concrete in accordance with Table 2461-3:

Table 2461-3 Concrete Type Designation		
Concrete Type	Target Air Content*, %	Maximum Water/Cement Ratio
1	2.0	≤ 0.53 for 1A43 ≤ 0.68 for 1C62 ≤ 0.64 for 1C Grout
3	6.5 †	≤ 0.45 †
* For concrete mix design purposes only    The water/cement ratio is defined as the ratio of the total water weight to the total cementitious weight. † Unless otherwise required by 2301 or elsewhere in the Contract.		

**B2 Grade Designation**

The Department will designate concrete grade using a letter to represent the anticipated compressive strength and the minimum cementitious content in accordance with 2461.3C, "Cementitious Content," and Table 2461-4:



**Table 2461-4  
Concrete Grade Designation**

<b>Concrete Grade</b>	<b>Type 1 Anticipated Compressive Strength, <i>psi [MPa]</i> *</b>	<b>Type 3 Anticipated Compressive Strength, <i>psi [MPa]</i> *</b>
U	6,300 [43]	5,600 [39]
V	6,000 [41]	5,300 [37]
W	5,700 [39]	5,000 [34]
X	5,400 [37]	4,700 [32]
Y	5,000 [34]	4,300 [30]
A	4,500 [31]	3,900 [27]
B	4,100 [28]	3,400 [23]
C	3,200 [22]	2,700 [19]
* Anticipated minimum strength produced in accordance with the Department specifications and cured for 28 days under laboratory conditions.		

The Concrete Engineer, in coordination with the Engineer, may increase the cement content for concrete with test cylinder results less than the anticipated compressive strength in accordance with Table 2461-4, "Concrete Grade Designation." The Contractor may request an increase in the cement content as approved by the Engineer, in conjunction with the Concrete Engineer.

### **B3 Slump Designation**

Refer to the slump designation for the upper limit of the slump range without a water reducer in accordance with Table 2461-5:

<b>Table 2461-5 Slump Designation</b>	
<b>Slump Designation</b>	<b>Slump Range without Water Reducer, <i>in [mm]</i></b>
1	½ – 1 [12 – 25]
2	1 – 2 [25 – 50]
3	1 – 3 [25 – 75]
4	2 – 4 [50 – 100]
5	2 – 5 [50 – 125]
6	3 – 6 [75 – 150]

**B4 Coarse Aggregate (CA) Designation**

Refer to the coarse aggregate designation for the range of optional coarse aggregates gradations allowed in the mix in accordance with Table 3137-4, "Coarse Aggregate Designation for Concrete," and Table 2461-6:

<b>Table 2461-6 Coarse Aggregate Designation for Concrete</b>	
<b>Range</b>	<b>Optional Coarse Aggregate Designation</b>
0	CA-00 only
1	CA-15 to CA-50, inclusive
2	CA-15 to CA-60, inclusive
3	CA-35 to CA-60, inclusive
4	CA-35 to CA-60, inclusive
5	CA-45 to CA-60, inclusive
6	CA-50 to CA-70, inclusive
7	CA-70 only
8	CA-80 only

**B5 Additional Designations**



For mix designs that require a specified class of coarse aggregate as defined in 3137.2.B, an additional letter will follow the fourth digit of the Mix Number such as "A" (Class A Aggregate Requirement).

The Engineer may identify special concrete mix designations with additional letters following the last digit such as "HE" (High Early), "WC" (Water-Cement Ratio), "HPC" (High Performance Concrete), "MS" (Microsilica), or others.

S-44.2 Mn/DOT 2461.3E shall be deleted and replaced with the following:

**E Concrete Admixtures ..... 3113**

The Contractor may use the following approved admixtures listed on the Approved Products list:

- (1) Type A, "Water Reducing Admixtures,"
- (2) Type B, "Admixtures Identified as Hydration Stabilizers," or
- (3) Type S, "Viscosity Modifying Admixtures."

Do not use admixtures other than cementitious materials, aggregates, water, air-entraining admixtures, and other admixtures referenced in (1), (2), and (3) above in the concrete unless otherwise required by or allowed in the Contract.

Use admixture dosage rates recommended by the manufacturer.

The Contractor may use calcium chloride in concrete as approved by the Engineer, in conjunction with the Concrete Engineer. Do not use calcium chloride in units containing prestressing steel or in bridge superstructure concrete.

**E1 Use of Additional Admixtures**

On a case by case basis, the Engineer will consider the use of additional admixtures provided the Contractor conforms with the following:

- (1) Provides a QC Plan for using additional admixtures.
- (2) Performs trial batches of the concrete including plastic and hardened concrete testing as directed by the Engineer.
- (3) Uses the same equipment, batch size, and materials proposed for the trial batches as proposed for the work. Incorporate the trial batches into the work with the approval of the Engineer.
- (4) The Contractor must demonstrate to the Engineer the ability to properly mix, control and place the concrete.

The Concrete Engineer, in coordination with the Engineer, will review the trial batch results and all related concrete testing for compliance with the QC Plan and the Contract.

Upon acceptance of the QC Plan, the Contractor will design the mix in accordance with 2461.2.F.2.

S-44.3 Mn/DOT 2461.3F shall be deleted.

S-44.4 Mn/DOT 2461.3G, 2461.3H, and 2461.3J shall be deleted and replaced with the following:

**G Job Mix Proportions**

**G1 Department Designed**

The Department will provide the estimated composition of concrete mixes unless otherwise required by the Contract.

The Department may adjust the mix composition of the concrete without adjusting the Contract unit price for any items of work.

**G1a Concrete Yield**

The Department defines concrete yield as the ratio of the volume of mixed concrete, less accountable waste, to the planned volume of the work constructed. The Department will not assume responsibility for the yield from a given volume of mixed concrete.

**G1b High-Early Strength Concrete**

When the Engineer requires high-early strength concrete, the concrete is designed in accordance with the following:

- Increasing the cement content of the concrete up to 30 percent and/or using an approved accelerator as allowed by the Engineer, in conjunction with the Concrete Engineer
- Using 100 percent portland cement unless allowed by the Contract or the Engineer
- A maximum cement content for a cubic yard [cubic meter] of concrete not to exceed 900 lb [535 kg].
- A w/c ratio not to exceed 0.38 unless specified elsewhere in the Contract.

**G2 Contractor Designed**

Design the concrete mix based on an absolute volume of 27.00 cu. ft  $\pm$  0.10 cu. ft [1.000 cu. m  $\pm$  0.003 cu. m] for the following:

- (1) Concrete paving mixes in accordance with 2301,
- (2) Concrete mixes with an anticipated or required 28-day compressive strengths of at least 5,000 psi [34 Mpa],
- (3) Precast concrete in accordance with 2405, 2412, 3236, 3238, 3621, 3622, 3630, 3661, and 3667
- (4) Colored concrete
- (5) Stamped concrete
- (6) Cellular Concrete Grout – Controlled Low Strength Material (CLSM)
- (7) Concrete as otherwise required by the Contract.

Submit the concrete mixes utilizing the Mn/DOT Contractor Mix Design Submittal Package available on the Department's website at least 21 calendar days before initial placement of the concrete mix. The Concrete Engineer will provide specific gravity and absorption data for mix design calculations.

The Concrete Engineer will review the mix design submittal and approve the materials and mix design for compliance with the Contract.

The Contractor assumes full responsibility for the mix design and performance of the concrete.

The Engineer determines final approval for payment based on satisfactory field placement and performance.



S-44.5 Mn/DOT 2461.4A4a shall be deleted and replaced with the following:

A4a Consistency

The Engineer will test the concrete for consistency using the slump test during the progress of the work. The Department may reject concrete batches with consistencies outside of the slump range in accordance with Table 2461-10. If any test shows the slump in excess of the upper limit of the slump range, the Engineer will reject the concrete represented by that test unless the Contractor makes adjustments to the concrete before use.

Adjust the slump within the allowable range to optimize both placement and finishing.

If not using a Department approved Type A water reducer at the manufacturer's recommended dosage rates listed on the Approved Products list, meet the slump values for the slump range without water reducer in accordance with Table 2461-10.

If using a Department approved Type A water reducer at the manufacturer's recommended dosage rates listed on the Approved Products list, meet the slump values for the slump range with water reducer in accordance with Table 2461-10.

Table 2461-10 Slump Range Designation		
Slump Designation	Slump Range without Water Reducer, in [mm]	Slump Range with Water Reducer, in [mm]
1	½ - 1 [12 - 25]	½ - 1 [12 - 25]
2	1 - 2 [25 - 50]	1 - 3 [25 - 75]
3	1 - 3 [25 - 75]	1 - 4 [25 - 100]
4	2 - 4 [50 - 100]	2 - 5 [50 - 125]
5	2 - 5 [50 - 125]	2 - 6 [50 - 150]
6	3 - 6 [75 - 150]	3 - 7 [75 - 175]

Contact the Engineer if encountering unusual placement conditions that render the specified slump range unsuitable. The Department will provide mix composition modifications to provide the desired change in consistency while maintaining the other specified properties of the concrete mix. Do not add water solely to temporarily facilitate the placement of concrete.

A4a(1) Concrete Placed by the Slip-Form Method

Place concrete that does not slough and is adequately consolidated at a slump value that optimizes placement for the designated mixture.

A4a(2) Non-Conforming Material

Only place concrete meeting the slump requirements in the work. If the Contractor places concrete not meeting the slump requirements into the work, the Engineer will not accept nonconforming concrete at the Contract unit price.

For concrete not meeting the required slump, the Engineer will make determinations regarding the disposition, payment, or removal. The Department will adjust the Contract unit price for the Contract pay item of the concrete in accordance with Table 2461-11A, 2461-11B, 2461-11C and 2461-11D. When there is not a separate Structural Concrete bid price for an item of work or the concrete is a minor component of the unit bid price, the Department will reduce payment based on a concrete price of \$100.00 per cu. yd [\$130.00 per cu. m] unless an invoice amount for the concrete in question is provided, whichever is greater.

Table 2461-11A General Concrete*	
Outside of Slump Range	Adjusted Contract Unit Price
Below slump range*	The Department will pay 95 percent of the relevant Contract unit price for materials placed as approved by the Engineer.
$\leq 1\frac{1}{2}$ in [40 mm] above slump range	The Department will pay 75 percent of the relevant Contract unit price for materials placed as approved by the Engineer.
$1\frac{1}{4}$ in [45 mm] – $2\frac{1}{4}$ in [55 mm] above slump range	The Department will pay 50 percent of the relevant Contract unit price for materials placed as approved by the Engineer.
$> 2\frac{1}{4}$ in [55 mm] above slump range	The Department will pay 25 percent of the relevant Contract unit price for materials placed as approved by the Engineer.
* If the Contractor places piling or footing concrete below the slump range, the Department will deduct \$100 per cu. yd [\$130 per cu. m] to the relevant Contract unit price of the concrete represented by the slump test. The Department will not reduce Contract unit price for low slump concrete placed with the slip-form method as approved by the Engineer.	

Table 2461-11B Bridge Deck Concrete	
Outside of Slump Range	Adjusted Contract Unit Price
Below slump range	The Department will pay 95 percent of the relevant Contract unit price for materials placed as approved by the Engineer.
$\leq 1\frac{1}{2}$ in [40 mm] above slump range	The Department will pay 75 percent of the relevant Contract unit price for materials placed as approved by the Engineer.
$> 1\frac{1}{2}$ in [40 mm] above slump range	The Department will pay 25 percent of the relevant Contract unit price for materials placed as approved by the Engineer.

Table 2461-11C Low Slump Bridge Deck Concrete From $\frac{1}{2}$ in [12 mm] to 1 in [25 mm]	
Outside of Slump Range	Adjusted Contract Unit Price
Below slump range	No deduction for materials placed as approved by the Engineer.
$\leq \frac{1}{2}$ in [12 mm] above slump range	The Department will pay 50 percent of the relevant Contract unit price for materials placed as approved by the Engineer.
$> \frac{1}{2}$ in [12 mm] – $\frac{3}{4}$ in [20 mm] above slump range	The Department will not pay for concrete placed but will allow the concrete to remain in place as approved by the Engineer.
$> \frac{3}{4}$ in [20 mm] above slump range	The Department will not pay for concrete. Provide additional testing as directed by the Engineer to determine if the concrete can remain or place or is subject to removal and replacement.



**Table 2461-11D**  
**Low Slump Concrete — Patching**  
**From ½ in [12 mm] to 1 in [25 mm]**

<b>Outside of Slump Range</b>	<b>Adjusted Contract Unit Price</b>
Below slump range	No deduction for materials placed as approved by the Engineer
≤ ½ in [12 mm] above slump range	The Department will pay 75 percent of the relevant Contract unit price for materials placed as approved by the Engineer.
≥ ¾ in [20 mm] above slump range	The Department will pay 25 percent of the relevant Contract unit price for materials placed as approved by the Engineer.

S-44.6 Mn/DOT 2461.4A4b shall be deleted and replaced with the following:

A4b Air Content

Maintain the air content of Type 3 general concrete at the specified target of 6.5.percent ±1.5 percent of the measured volume of the plastic concrete in accordance 1503.

Make any adjustments immediately to maintain the desired air content.

Measure the air content at the point of placement but before consolidation.

A4b(1) Non-Conforming Material

Only place Type 3 concrete meeting the air content requirements in the work. If the Contractor places Type 3 concrete not meeting the air content requirements into the work, the Engineer will not accept nonconforming concrete at the Contract unit price.

For concrete not meeting the required air content, the Engineer will make determinations regarding the disposition, payment, or removal. The Department will adjust the Contract unit price for the Contract pay item of the concrete in accordance with Table 2461-17. When there is not a separate Structural Concrete bid price for an item of work or the concrete is a minor component of the unit bid price, the Department will reduce payment based on a concrete price of \$100.00 per cu. yd [**\$130.00 per cu. m**] unless an invoice amount for the concrete in question is provided, whichever is greater.



General Concrete (Target Air Content 6.5%)	
Air Content, %	Adjusted Contract Unit Price
> 10.0	The Department will pay 75 percent of the Contract unit price for the concrete represented for material placed as approved by the Engineer.
>8.0 – 10.0	The Department will pay 95 percent of the Contract unit price for the concrete represented for material placed as approved by the Engineer.
5.0 – 8.0	The Department will pay 100 percent of the Contract unit price for the concrete represented, for material placed as approved by the Engineer.
>4.0 – <5.0	The Department will pay 75 percent of the Contract unit price for the concrete represented for material placed as approved by the Engineer.
>3.5 – 4.0	The Department will pay 25 percent of the Contract unit price for the concrete represented and placed as approved by the Engineer. If the Engineer, in conjunction with the Concrete Engineer, determines the surface is exposed to freeze-thaw cycling, coat the concrete with an approved epoxy penetrant sealer from the Mn/DOT Approved Products list.
≤ 3.5	Remove and replace concrete in accordance with 1503, “Conformity with Plans and Specifications” and 1512, “Unacceptable and Unauthorized Work” as directed by the Engineer. If the Engineer, in conjunction with the Concrete Engineer, determines the concrete can remain place, the Engineer will not pay for the concrete and if the Engineer determines the surface is exposed to salt-brine freeze-thaw cycling, coat with an approved epoxy penetrant sealer from the Mn/DOT Approved Products list.

S-44.7 Mn/DOT 2461.4A5 shall be deleted and replaced with the following:

A5 Test Methods and Specimens

Use the Department - provided molds for the test specimens in accordance with the following:

- (1) Use 4 in × 8 in [100 mm × 200 mm] cylinder molds,
- (2) Use 6 in × 12 in [150 in × 300 mm] cylinder molds for maximum aggregate sizes greater than 1¼ in [31.5 mm],
- (3) Use 6 in × 6 in × 20 in [150 in × 150 in × 500 mm] beam molds, use other beam mold sizes as approved by the Engineer.

Provide curing tanks of adequate size and number for curing all of the concrete test specimens in accordance with 2031.3.C. Supply the curing tanks with heaters to maintain a water temperature of 73° F ± 3° F [23° C ± 2° C].

Together with the Department, perform the following:

- (1) Determine the required testing rates in accordance with the Schedule of Materials Control,
- (2) Take samples after the first ¼ cu yd [cu. m] and before discharging the last ¼ cu. yd [cu. m] of the batch,
- (3) Perform concrete sampling and testing meeting the requirements of the Mn/DOT Concrete Manual,
- (4) Measure slump and air content, and make strength specimens when placing the concrete,
- (5) Record field measurements, including strength specimen identifications on Mn/DOT Form 2448, *Weekly Concrete Report*, to provide to the Concrete Engineer.

The Engineer will transport the cylinders to the Agency laboratory for testing.

A5a Standard Strength Cylinders



The Department will perform the following for standard strength cylinders:

- (1) Cast cylinders for testing at 28 days,
- (2) Mark cylinders for identification of the represented unit or section of concrete,
- (3) Cure the cylinders meeting the requirements of the Mn/DOT Concrete Manual, and
- (4) Submit cylinders and a completed cylinder identification card to the Agency laboratory.

The Producer of precast units is responsible for casting standard strength cylinders.

**A5b Control Strength Cylinders**

The Engineer will use control cylinders to determine when the sequence of construction operations is dependent upon the rate of concrete strength development. At the request of the Contractor, the Engineer will cast enough control cylinders to determine when the concrete attains the required strength for all desired control limitations.

The Department will perform the following for control strength cylinders:

- (1) Cast control cylinders in sets of 3,
- (2) Mark control cylinders for identification of the represented the unit or section of concrete,
- (3) Cure the cylinders in the same location and under the same conditions as the concrete structure or unit involved meeting the requirements of the Mn/DOT Concrete Manual, and
- (4) Submit cylinders and a completed cylinder identification card to the Agency laboratory.

In lieu of transporting the cylinders to the laboratory, the Contractor may perform the testing on the control cylinders on a portable mechanical or hydraulic testing machine checked and calibrated with a standard proving ring as approved by the Engineer and in the presence of the Engineer.

The Producer of precast units is responsible for casting control strength cylinders.

**A5c Strength Specimens for Concrete Paving**

Use flexural beams to determine strength or provide cylinders as allowed by the Contract or approved by the Engineer.

Cast standard beams or cylinders for testing at 28 days.

Cast a sufficient number of control beams or cylinders to determine when the concrete attains the required strength for all desired control limitations.

Cure the standard beams or cylinders meeting the requirements of the Mn/DOT Concrete Manual.

Cure the control beams or cylinders in the same location and under the same conditions as the concrete structure or unit involved meeting the requirements of the Mn/DOT Concrete Manual.

The Engineer will test the flexural beams and record the results on Mn/DOT Form 2162, "*Concrete Test Beam Data*."

If using cylinders, the Engineer will submit cylinders and a completed identification card to the Agency laboratory.

**S-44.8 Mn/DOT 2461.4D1 shall be deleted and replaced with the following:**

**D Certified Ready-Mix Concrete**

D1 Definition

The Department defines ready-mix concrete as one of the following:

- (1) Central-mixed concrete proportioned and mixed in a stationary plant and hauled to the point of placement in revolving drum agitator trucks or a truck mixer, or
- (2) Truck-mixed concrete proportioned in a stationary plant and fully mixed in truck mixers.

Commonly used certified ready-mix terms are defined in the following:

Certified Ready-Mix Terminology	
Term	Definition
Mix design water	The maximum allowable water content for 1 cu. yd [1 cu. m] of concrete in accordance with Mn/DOT Form TP 02406, <i>Estimated Composition of Concrete Mixes</i> .
Total moisture factor	Factor used to determine total amount of water carried by a given wet aggregate.
Absorption factor	Factor used to determine the water contained within the pores of the aggregate and is held within the particles by capillary force.
Free moisture	The water that is carried on the surface of the aggregate that becomes part of the total water.
Batch water	Water actually batched into the truck by the batcher.
Total water	Batch water added to free moisture. Total water may also include the water used in diluting admixture solutions.
Temper water	Water added in mixer to adjust slump.
Total actual water	The water in the concrete mixture at the time of placement from any source other than the amount absorbed by the aggregate. It includes all batch water placed in the mixer, free moisture on the aggregate and any water added to the ready mix truck prior to placement.
Ready-Mix Producer or "Producer"	Party that is producing the concrete for the Contract. It is understood that the Ready-Mix Producer is the agent of the Contractor.

S-44.9 Mn/DOT 2461.4D2 shall be deleted and replaced with the following:

D2 General Requirements

Supply all ready-mix concrete from Mn/DOT Certified Concrete Plants in accordance with 2461.4D7.

The Engineer will reject ready-mix concrete delivered to the work site not meeting the specified requirements for delivery time, consistency, quality, air content, or other properties as unacceptable work in accordance with 1512, "Unacceptable and Unauthorized Work."

Provide batches for a delivered load of concrete in sizes of at least 1 cu. yd [1 cu. m].

Handle washout water in accordance with 1717.

S-44.10 The first two paragraphs of Mn/DOT 2461.4D5c shall be deleted and replaced with the following:

D5c Mixing In Truck Mixer



Charge the materials into the truck mixer drum by introducing sufficient water before adding solid materials. Perform charging operations without losing materials.

Leave the truck mixer at the plant site for a minimum of 5 minutes or 50 revolutions during the mixing period. Transport the concrete at agitating speed to the point of placement.

**S-44.11 Mn/DOT 2461.4D6 shall be deleted and replaced with the following:**

**D6 Delivery Requirements**

Place concrete into the work in accordance with the following:

- (1) Type 1 Concrete –within 90 minutes of batching, and
- (2) Type 3 Concrete –within 60 minutes of batching when adding the air entraining agent at the plant. If adding the entire dosage of air entraining agent at the jobsite, place concrete within 90 minutes of batching. Do not add additional mixing water once the concrete is 60 minutes old.

The Contractor may transport Type 3 concrete in non-agitating equipment if the concrete is discharged within 45 minutes of batching.

Batch time starts when the batch plant or the transit mix truck adds the cement to the other batch materials.

**D6a Field Adjustments**

The Engineer will test the concrete for compliance with 2461.4A4a and 2461.4A4b according to the following:

- (1) If the first test taken by the Engineer passes, the Engineer will resume verification testing according to the Schedule of Materials Control.
- (2) If the first test taken by the Engineer fails, make adjustments and perform any quality control testing prior to the Engineer performing a final test. Acceptance or rejection of the truck is based on the Engineer's final test result.
- (3) The Engineer will test up to 2 additional trucks according to 2461.4D6a(1) and 2461.4D6a(2).
- (4) If the concrete is not within specification after the first 3 trucks, the Engineer will reduce their verification testing rate to once per truck for acceptance.
- (5) Once the Engineer returns to normal verification testing according to the Schedule of Materials Control and a failing test occurs, the Engineer will repeat 2461.4D6a(2), 2461.4D6a(3) and 2461.4D6a(4).

**S-44.12 Mn/DOT 2461.4D7 shall be deleted and replaced with the following:**

**D7 Certified Ready-Mix Plant Program**

Provide ready-mix concrete produced by a certified ready-mix plant. Perform quality control of concrete production under a certification program for ready-mix concrete plants.

**D7a Plant Certification**

Before concrete production each season, ensure the producer performs the following:

- (1) Performs an on-site inspection at the concrete plant with the Engineer who completes a Mn/DOT Form 2163, *Concrete Plant Contact Report*.

- (2) Signs the report certifying compliance with the Certified Ready-Mix requirements and continual maintenance of the plant. The Engineer will also sign Mn/DOT Form 2163, *Concrete Plant Contact Report*.
- (3) Provides a copy of the current Mn/DOT Concrete Manual and retain on-site.
- (4) Equips the Certified Ready-Mix Plant with a working facsimile machine or an email address.
- (5) Keeps plant reports, charts, and supporting documentation on file at the plant site for 5 calendar years.

D7b Sampling and Testing

Provide a Mn/DOT Certified Concrete Plant Level 2 Technician to oversee testing and plant operations and to remain on-site during concrete production or have cellular phone capability.

Provide facilities in accordance with 1604 for the use of the plant technician in performing tests.

Ensure the producer provides technicians with certification at least meeting Mn/DOT Concrete Plant Level 1 to perform all of the duties in accordance with the Mn/DOT Concrete Manual. The Engineer will provide technicians with certification at least meeting Mn/DOT Concrete Plant Level 1 to perform all of the duties in accordance with the Mn/DOT Concrete Manual.

Ensure the producer performs testing in accordance with the Mn/DOT Concrete Manual and determines testing rates meeting the requirements of the Schedule of Materials Control. The Engineer performs testing in accordance with the Mn/DOT Concrete Manual and determines testing rates meeting the requirements of the Schedule of Materials Control.

Take samples randomly using ASTM D 3665, Section 5.

Perform testing at the certified ready-mix plant site. Perform additional testing as directed by the Engineer. The Engineer may oversee the quality control sampling process.

Provide equipment and perform calibrations meeting the requirements of the following:

- (1) AASHTO T 27, "Sieve Analysis of Fine and Coarse Aggregates,"
- (2) AASHTO T 255, "Total Moisture Content of Aggregate by Drying,"
- (3) AASHTO M 92, "Wire-cloth Sieves for Testing Purpose," and
- (4) AASHTO M 231, "Weighing Devices Used in the Testing of Materials."

D7c Gradations

Determine the gradation of the fine aggregates and the coarse aggregates as required by the Contract. Use mechanical shakers for sieve analysis of fine and coarse aggregates.

Identify quality control companion samples with the following information:

- (1) Date,
- (2) Test number,
- (3) Time,
- (4) Type of material,
- (5) Plant, and
- (6) Sampling location.

Document gradation results on Mn/DOT Form 2449, *Weekly Concrete Aggregate Report*.

Chart the results of all producer and Department gradation results of the coarse aggregate and the No. 8 [2.36 mm], No. 30 [600  $\mu\text{m}$ ], and No. 50 [300  $\mu\text{m}$ ] sieves of the fine aggregate.



The producer may request a reduction in testing rates as approved by the Engineer, in conjunction with the Concrete Engineer.

If the gradation tests on split samples from quality control or verification samples result in a variation between the producer and the Department greater than that set forth the table below, the producer and Engineer will cooperatively take and split a new sample. The producer tests samples in the presence of the Engineer to serve as a check on the process to correct deviations from the standard testing procedure. If this problem continues, the Engineer, in conjunction with the Concrete Engineer, will perform a total review of the plant.

Allowable Variations on Percent Passing Sieves	
Sieve Size	Allowed Percentage
2 in [50 mm] – ¾ in [19.5 mm]	± 6
No. 4 [4.75 mm] – No. 30 [600 µm]	± 4
No. 50 [300 µm]	± 3
No. 100 [150 µm]	± 2
No. 200 [75 µm]	± 0.6

D7c(1) Non-conforming Material

Only place concrete meeting the gradation requirements in the work. If the Contractor places concrete not meeting the gradation requirements into the work, the Engineer will not accept nonconforming concrete at the Contract unit price.

For concrete not meeting the required gradation, the Engineer will make determinations regarding the disposition, payment, or removal. The Department will adjust the Contract unit price for the Contract pay item of the concrete in accordance with Table 2461-9 and 2461-10. When there is not a separate Structural Concrete bid price for an item of work or the concrete is a minor component of the unit bid price, the Department will reduce payment based on a concrete price of \$100.00 per cu. yd [**\$130.00 per cu. m**] unless an invoice amount for the concrete in question is provided, whichever is greater.

Table 2461-7A General Concrete for Individual Aggregate Fractions Fine and Coarse Aggregate Specification Sieves other than Fine Aggregate No. 200 [75 µm]	
Outside of Specification, %	Adjusted Contract Unit Price
≤ 3	The Department will pay 98 percent of the relevant Contract unit price for concrete placed as approved by the Engineer.
4 to 6	The Department will pay 95 percent of the relevant Contract unit price for concrete placed as approved by the Engineer.
7 to 10	The Department will pay 90 percent of the relevant Contract unit price for concrete placed as approved by the Engineer.
> 10	The Department will pay 75 percent of the relevant Contract unit price for concrete placed as approved by the Engineer.

Table 2461-7B General Concrete for No. 200 [75 µm] Sieve of Fine Aggregate	
Outside of Specification, %	Adjusted Contract Unit Price
≤ 0.3	The Department will pay 98 percent of the relevant Contract unit price for concrete placed as approved by the Engineer.
0.4 to 0.6	The Department will pay 95 percent of the relevant Contract unit price for concrete placed as approved by the Engineer.
0.7 to 1.0	The Department will pay 90 percent of the relevant Contract unit price for concrete placed as approved by the Engineer.
> 1.0	The Department will pay for 75 percent of the relevant Contract unit price for concrete placed as approved by the Engineer.

If a failure occurs on the fine aggregate No. 200 [75 µm] sieve and on other sieves concurrently, the Department will only reduce the price based on the larger percentage deduction. The Engineer, in conjunction with the Concrete Engineer, will determine adjusted Contract unit prices for coarse aggregate quality failures.

If the results still do not agree, the Department will resolve the dispute through Third Party Resolution in accordance with the Mn/DOT Contract Administration Manual

#### D7d Moisture Content

Ensure the producer performs the following:

- (1) Determine the moisture content using the oven dry method in all fractions of the aggregate.
- (2) Document moisture tests on Mn/DOT Form 2152, *Concrete Batching Report*.
- (3) Chart the moisture content of each aggregate.

In addition to the oven dry moisture test, the producer may obtain the moisture content in the fine aggregate using a moisture probe. To obtain approval for the use of a moisture probe, calibrate the moisture probe before each construction season meeting the requirements of the Mn/DOT Concrete Manual. Verify and chart both the probe moisture content and the oven-dry verification moisture test each week.

#### D7e Plant Diaries

Provide daily plant diaries in accordance with the Mn/DOT Concrete Manual using an approved form from the Department's website.

#### D7f Batch Weight Verification

The Engineer will observe the batching process to verify weights shown on the Certificate of Compliance.

The Engineer will observe the actual water batched during each collection of verification gradations in accordance with the following:

- (1) Watching the ready-mix truck reverse the drum after washing,
- (2) Verifying use of the current moisture test,
- (3) Verifying that any additional water added to adjust the slump is recorded, and
- (4) Validating water weights on the load batched and comparing the total water with the design water

The Engineer will document the actual water batched on Mn/DOT Form 24143, *Weekly Certified Ready-Mix Plant Report* and submit a copy to the Engineer to provide to the Concrete Engineer.



The Engineer will provide plant diaries in accordance with the Mn/DOT Concrete Manual.

#### D7g Certificate of Compliance

Provide a computerized Certificate of Compliance with each truckload of ready-mixed concrete at the time of delivery. The Department defines computerized to mean a document that records mix design quantities from load cells and meters.

If the computer that generates the Certificate of Compliance malfunctions, the Engineer may allow the Contractor to finish any pours in progress if the producer issues a handwritten Mn/DOT Form 0042, *Certificate of Compliance* with each load. Do not allow the producer to begin new pours without a working computerized Certificate of Compliance.

Provide a computerized Certificate of Compliance from the producer for each item of information, including the following:

- (1) Name of the ready-mix concrete plant,
- (2) Name of the Contractor,
- (3) Date,
- (4) State Project Number (SP) or (SAP),
- (5) Bridge Number (when applicable),
- (6) Time concrete was batched,
- (7) Truck number,
- (8) Quantity of concrete in this load,
- (9) Running total of each type of concrete, each day for each project,
- (10) Type of concrete (Mn/DOT Mix Designation Number),
- (11) Cementitious materials using Mn/DOT Standard Abbreviations,
- (12) Admixtures using Mn/DOT Standard Abbreviations
- (13) Aggregate sources using 5 digit State Pit Numbers, and
- (14) Admixture quantity fl. oz. per 100 pounds of cementitious [mL per kg] or oz per cu. yd [mL per cu. m]
- (15) Batch information for materials using Mn/DOT standardized labels to represent each column shown in Table 2461-7C. Present the information in the order listed across the page (a through k) or print the information using two lines provided that the materials are identified in each line of information.

**Table 2461-7C**  
**Standardized Certificate of Compliance Labels**

Category	Formula	Standard Label
a) Ingredients (aggregate, cementitious, water, admixtures)	—	Ingredient
b) Product Source (Mn/DOT Standard Abbreviation)	—	Source
c) Total Moisture Factor (in decimals to 3 places)	—	MCFac
d) Absorption Factor (in decimals to 3 places)	—	AbsFac
e) Mn/DOT mix design oven dry (OD) weights, lb/cu. yd [kg/cu. m]	—	OD
f) Absorbed moisture in the aggregates, lb/cu. yd [kg/cu. m]	(e × d)	Abs
g) Saturated surface dry (SSD) weights for aggregates, lb/cu. yd [kg/cu. m]	(e + f)	SSD
h) Free moisture, lb/cu. yd [kg/cu. m]	(c - d) × e	Free Mst
i) Target weights for one cubic yard of concrete, lb/cu. yd [kg/cu. m]	(g + h)	CY Targ [CM Targ]
j) Target batch weights, lb [kg]	(cu. yd × i) [cu. m × i]	Target
k) Actual batch weights, lb [kg]	—	Actual

NOTE: Actual cubic yards [cubic meters] batched may vary due to differences in air content, weight tolerances, specific gravities of aggregates, and other variables.



- (16) Total Water (Batch Water + Free Moisture) in pounds [kilograms]
- (17) Water available to add  $[(\text{Mix Design Water}) \times (\text{Target CY (CM)}) - \text{Total water}]$  in gallons [liters]
- (18) Space to note the water adjustment information, including:
  - (18.1) Water in gallons [liters] added to truck at plant filled in by producer, enter zero (0) if no water is added.
  - (18.2) Water in gallons [liters] added to truck at the jobsite filled in by producer or Engineer, enter zero (0) if no water is added.
  - (18.3) Total actual water in pounds [kilogram] (Total Water from Certificate of Compliance plus any additions).
- (19) The following information printed with enough room beside each item to allow the Engineer to record the test results:
  - (19.1) Air content,
  - (19.2) Air temperature,
  - (19.3) Concrete temperature,
  - (19.4) Slump,
  - (19.5) Cylinder number,
  - (19.6) Location or part of structure,
  - (19.7) Time discharged, and
  - (19.8) Signature of Inspector.
- (20) Location for the signature of the Mn/DOT Certified Plant 1 Technician representing the Producer. The technician will review the first Certificate of Compliance for each mix type, each day, for accuracy and hand sign the Certificate of Compliance at a location designated for signature signifying agreement to the terms of this policy and to certify that the materials itemized in the shipment comply with the specifications and plans.

#### D7h Decertification

If the Contractor provides concrete from a plant that cannot produce concrete that fails to perform testing, report accurate results, or complete required documentation, the Engineer may reject the concrete as unacceptable in accordance with 1503, "Conformity with Plans and Specifications" and 1512, "Unacceptable and Unauthorized Work."

The Concrete Engineer, with coordination from the Engineer, may decertify the plant and halt production of concrete if the producer performs the following:

- (1) Procedural changes made after the completion of the Concrete Plant Contact Report and after starting the work that cause non-compliance with the program,
- (2) Continually produces concrete in non-compliance with this section,
- (3) Completely disregards the requirements of this section, and
- (4) Submits fraudulent test reports

If decertifying the plant, the Concrete Engineer may perform the following:

- (1) Revoke plant certification.
- (2) Revoke technician certification for individuals involved,
- (3) Revoke bidding privileges as determined by the Construction Engineer, and
- (4) Criminal prosecution for fraud as determined by the Attorney General.

#### S-44.13 CONCRETE CURING

Mn/DOT specifications: 2301.3M2, 2401.3G, 2404.3C3, 2521.3C3b, 2531.3G2 are hereby modified to include the following provision:

The Contractor shall place all types of membrane cure material homogeneously to provide a uniform solid white opaque coverage on all exposed concrete surfaces (equal to a white sheet of typing paper). The membrane cure shall be placed within ½ hour of concrete placement unless otherwise directed by



the Engineer. Failure to comply with these provisions will result in a price reduction for the concrete item involved in accordance with Mn/DOT 1503.

#### **S-45 (2501-6) STORM SEWER**

This work consists of constructing storm sewers in accordance with the applicable Mn/DOT Standard Specifications and in accordance with The City of Rochester Standards for Street and Utility Construction:

- S-45.1 **Sewer pipe and aprons** of each design designation will be measured by length along the line of pipe or each. Terminal points of measurement will be the pipe end at free outlets; the point of connection with in-place pipe; the center of manholes or catch basins; the point of centerline intersections at branch fittings; or the point of juncture with other appurtenances or units as defined.
- S-45.2 **Energy Dissipator Rings.** Payment for the energy dissipator rings and associated ties shall be considered incidental to the respective pipe item.
- S-45.3 **Pipe Subdrains** This drain is intended to collect and discharge infiltration water that may accumulate in the bottom of granular-backfilled subcuts. Subcut drains may also be used to control high groundwater conditions.  
Pipe shall generally be placed according to City Plate 1-08, and plan details, but other configurations may be approved by the Engineer. Unless otherwise specified, drain grades shall not be less than 0.5%. At least 1' of subcut backfill shall be placed above the pipe before any compactive effort is applied.  
Subcut drain pipe shall be a 4 inch perforated PVC Pipe wrapped with Geotextile, Mn/DOT 3733, Type I. Fine Filter Aggregate around pipe shall meet the requirements of Mn/DOT 3149.2J and connection to storm sewer shall be considered incidental to the pipe installation.
- S-45.4 **Construct Drainage Structure Design Spec \_\_\_\_** of each design will be measured by number of each constructed complete-in-place, including the base and castings as required, for the depth increments as stated in the proposal. Payment for constructing structures at the appropriate Contract prices will be compensation in full for all costs of the work.
- S-45.5 **Casting Assembly** of each design will be measured by number of each installed. Payment for Casting Assembly at the appropriate Contract prices will be compensation in full for all costs of the work. This work includes, but is not limited to removing the existing casting and adjusting rings, furnishing and installing the new casting with adjusting rings set to the new elevation on the existing structure.
- S-45.6 **Adjust Drainage Structure** Manholes to be adjusted from existing to proposed street elevation that can be accommodated by the addition or removal of adjusting rings, with a maximum of 12" of adjusting rings allowable, shall be considered under the pay item "Adjust Drainage Structure" and paid for accordingly.
- S-45.7 **Adjust Frame and Ring** Catch Basins to be adjusted from existing to proposed street elevation that can be accommodated by the addition or removal of adjusting rings, with a maximum of 12" of adjusting rings allowable, shall be considered under the pay item "Adjust Frame & Ring Casting" and paid for accordingly.
- S-45.8 **Reconstruct Drainage Structure** Structures to be adjusted from existing to proposed elevation that cannot be accommodated by the addition or removal of adjusting rings, or those manholes to be adjusted over 12" shall be considered under the pay item "Reconstruct Drainage Structure" and paid for accordingly.

- S-45.9 **Connect into Existing Drainage Structure** will be made by the number of connections constructed as specified. Payment will be at the Contract bid price per each, which shall be compensation in full for all costs incidental thereto, including but not limited to, all materials and labor necessary to connect the proposed drainage structure to the existing storm sewer pipe. Any damage caused to the existing storm sewer pipe shall be repaired at no expense to the Department and to the satisfaction of the Engineer.
- S-45.10 **Connect into Existing Sewer** will be made by the number of connections constructed as specified. Payment will be at the Contract bid price per each, which shall be compensation in full for all costs incidental thereto, including but not limited to, all materials and labor necessary to connect the proposed sewer. Any damage caused to the existing sewer pipe shall be repaired at no expense to the Department and to the satisfaction of the Engineer.
- S-45.11 **Basis of Payment**  
Trenching, Bedding, Encasement and Backfill material for each type of pipe shall be according to the manufacturers' recommendations for pipe installations in a roadway section or T100, whichever is more stringent. All costs of furnishing and placing the pipe installation materials shall be considered incidental to the installation of the pipe.

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
2501.515	___" ___ PIPE APRON .....	EACH
2501.521	___" SPAN CS PIPE-ARCH CULVERT .....	L F
2501.573	INSTALL PIPE APRON .....	EACH
2503.511	___" ___ PIPE SEWER CL. ....	L F
2503.521	___" SPAN RC PIPE-ARCH SEWER CLASS .....	L F
2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN SPECIAL _ .....	EACH
2506.516	CASTING ASSEMBLY .....	EACH
2506.522	ADJUST FRAME & RING CASTING .....	EACH
2506.602	RECONSTRUCT DRAINAGE STRUCTURE .....	EACH
2506.602	ADJUST DRAINAGE STRUCTURE .....	EACH
2506.602	CONNECT INTO EXISTING DRAINAGE STRUCTURE .....	EACH
2506.602	CONNECT INTO EXISTING STORM SEWER .....	EACH

**S-46 (2503-6) SANITARY PIPE SEWER**

This work shall consist of furnishing and installing polyvinyl chloride (PVC) pipe and fittings in accordance with the Plans, and in accordance with The City of Rochester Standards for Street Construction.

- S-46.1 **Maintenance of Service**  
Disruption of sanitary sewer or water service during the construction of this project shall be kept to a minimum. Water and sewer services shall not be disrupted for more than 4 hours. The City of Rochester and all affected property owners and residents shall be notified a minimum of 48 hours prior to disruption of service.
- S-46.2 **Sewer pipe** of each design designation will be measured by length along the line of pipe. Terminal points of measurement will be the point of connection with in-place pipe; the center of manholes; the point of centerline intersections at branch fittings; or the point of juncture with other appurtenances or units as defined
- S-46.3 **Disconnect/Reconnect to existing Sanitary Sewer Service**, the need may occur depending on line and grade of other utilities on the project. This work shall be measured by the each and shall include all materials needed to remove and replace the existing



sewer service including but not limited to: excavation, bedding, backfill, \_\_\_" Alternate Pipe Sewer and connections to in place sewer service line.

- S-46.4 **Sanitary Sewer Manholes and Risers** shall be constructed according the City of Rochester Detail Plate.
- S-46.5 **Adjust Frame and Ring** Manholes to be adjusted from existing to proposed street elevation that can be accommodated by the addition or removal of adjusting rings, with a maximum of 12" of adjusting rings allowable, shall be considered under the pay item "Adjust Frame and Ring" and paid for accordingly.
- S-46.6 **Reconstruct Manhole** Manholes to be reconstructed from existing to proposed street elevation that cannot be accommodated by the addition or removal of adjusting rings, or those manholes to be adjusted over 12" shall be considered under the pay item "Reconstruct Manholes".
- S-46.7 **Basis of Payment**  
Trenching, Bedding, Encasement and Backfill material for each type of pipe shall be according to the manufacturers' recommendations for pipe installations in a roadway section or T100, whichever is more stringent. All costs of furnishing and placing the pipe installation materials shall be considered incidental to the installation of the pipe.

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
2506.522	ADJUST FRAME & RING CASTING.....	EACH
2506.602	RECONSTRUCT MANHOLES.....	EACH

#### **S-47 (2504) WATERMAIN**

This work shall consist of providing all labor, equipment, and materials to construct the watermain. All work shall be done in accordance with The City of Rochester Standards for Street Construction.

- S-47.1 **Maintenance of Service**  
Disruption of watermain flows during the construction of this project shall be kept to a minimum and considered incidental to the project. Water flows shall not be disrupted for more than 4 hours.  
The City of Rochester Public Utilities and all affected property owners and residents shall be notified a minimum of 48 hours prior to disruption of service.
- S-47.2 **Disconnect/Reconnect Water Services** will be measured by the number of services installed generally 3/4" or 1" however some services may be larger, complete as specified. Payment will be made at the Contract bid price per each, which shall be compensation in full for all costs incidental thereto including, but not limited to furnish and install a new corporation stop and up to 8 feet of new copper service pipe to match existing service size, regardless of service size, for each reconnection.
- S-47.3 **Relocate Hydrants and Valves** shall be constructed according to section W200 and the detail plate. Prior to relocation, the hydrant and gate valve shall be cleaned of all foreign matter and after installation shall be disinfected in accordance with the procedures described in paragraphs No.'s 1227 and 1228 of Section XII "Manual of Water Supply Sanitation" of the Minnesota Department of Health. Hydrant and valve relocation will be measured by the number of hydrants installed complete with gate valve and housing as specified. Payment will made under Item 2504.602 (Relocate Hydrant and Valve) at the Contract bid price per each, which shall be compensation in full for all costs incidental thereto including, but not limited to, any additional water leads, drain pits, concrete blocking, extensions, risers or fittings necessary to complete the relocation.

- S-47.4 **Hydrants** shall be constructed according to section W200 and the detail plate. Hydrant installation will be measured by the number of hydrants installed complete with gate valve and housing as specified. Payment will be made at the Contract bid price per each, which shall be compensation in full for all costs incidental thereto including, but not limited to any additional water leads, drain pits, concrete blocking, extensions, risers or fittings necessary to complete the new installation.
- S-47.5 **4-12" Gate Valve and Box** shall be constructed according to section W200 and the detail plate. Measurement will be made by the number of valves and boxes installed as specified. Payment will be made at the Contract bid price per each, which shall be compensation in full for all costs incidental thereto to install the valve and box complete and in place.
- S-47.6 **4-12" Watermain** shall be constructed according to section W200 and the detail plate. Measurement shall be by the linear foot. This work includes, but is not limited to all materials necessary maintain service, excavation, bedding and backfill necessary to install the watermain.
- S-47.7 **Lower Watermain** shall be constructed according to section W200 and the detail plate. Measurement shall be by the linear foot. Lower watermain will be measured by the linear foot installed complete with fittings as specified for the diameter. Payment will made under Item 2504.603 (Lower \_\_\_" Watermain) at the Contract bid price per linear foot, which shall be compensation in full for all costs incidental thereto including, but not limited to, any additional concrete blocking, extensions, risers or fittings necessary to complete the lowering.
- S-47.8 **Basis of Payment**  
Trenching, Bedding, Encasement and Backfill material for each type of pipe shall be according to the manufacturers' recommendations for pipe installations in a roadway section or T100, whichever is more stringent. All costs of furnishing and placing the pipe installation materials shall be considered incidental to the installation of the pipe.

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
2504.602	RELOCATE HYDRANT & VALVE .....	EACH
2504.602	ADJUST HYDRANT AND GATE VALVE .....	EACH
2504.603	LOWER 8" WATERMAIN .....	L F
2504.603	LOWER 12" WATERMAIN.....	L F
2504.604	4" INSULATION.....	S Y

**S-48 (2511) RIPRAP AND FABRIC**

Rip Rap shall be in accordance with the provisions of 2511, 3601 and 3733.

S-48.1 **Materials:**

Random Riprap: shall be Class III-IV, in accordance with Mn/DOT Section 3601.

Geotextile Fabric: shall be Type IV, in accordance with Mn/DOT Spec. 3733

S-48.2 **Measurement and Payment**

<u>Item No.</u>	<u>Item</u>	<u>Unit</u>
2511.501	RANDOM RIPRAP CLASS III.....	C Y
2511.501	RANDOM RIPRAP CLASS IV.....	C Y
2511.515	GEOTEXTILE FILTER TYPE IV .....	S Y



---

**S-49 (2521) CONCRETE WALK**

The provisions of Mn/DOT 2521 are modified in accordance with Rochester Detail Plate 2-12 and 2-13, and the following:

**S-49.1 Aggregate for Concrete Walk and pedestrian ramps**

The Contractor shall place a minimum of 100mm (**4 inches**) of compacted crushed rock base under all concrete walks constructed. Furnishing and placing the crushed rock base will be considered incidental to the walk construction and no separate payment will be made therefore.

**S-49.2 Mn/DOT 2521.3C3 is hereby modified to include the following provision:**

After completing final finishing operations, cure all exposed concrete surfaces for at least 72 hours. Extend the minimum curing period to 96 hours when using fly ash or cementitious substitutions as defined in 2461.A.6. Use one of the following curing methods:

- (1) Place the membrane curing compound conforming to 3754 or 3755 within 30 minutes of concrete placement or once the bleed water has dissipated, unless the Engineer directs otherwise in accordance with 2521.3.E.1.a. Place the membrane curing compound on the edges within 30 minutes after permanent removal of the forms or curing blankets, unless the Contract requires otherwise.
- (2) Place plastic curing blankets or completely saturated burlap curing blankets as soon as practical without marring the surface in accordance with 2521.3.E.1.b.

Failure to comply with these provisions will result in the Engineer applying a monetary deduction in accordance with 1503. When there is not a separate Contract unit price for Structural Concrete, the Department will apply a monetary deduction of \$50.00 per cu. yd [\$65.00 per cu. m] or 50 percent of the Contractor-provided invoice amount for the concrete in question, whichever is less.

Whenever weather conditions are such as to cause unusual or adverse placing and finishing conditions, expedite the application of a curing method or temporarily suspend the mixing and placing operations, as the conditions require.

If necessary to remove the coverings to saw joints or perform other required work, and if the Engineer approves, remove the covering for the minimum time required to complete that work.

**C3a Curing Methods**

**C3a(1) Membrane Curing Method**

Before application, agitate the curing compound as received in the shipping container to obtain a homogenous mixture. Protect membrane curing compounds from freezing before application. Handle and apply the membrane curing compound in accordance with the manufacturer's recommendations.

Apply the curing compound with an approved airless spraying machine in accordance with the following:

- (1) At a rate of 1 gal per 150 sq. ft (1 L per 4 m<sup>2</sup>) of surface curing area.
- (2) Apply homogeneously to provide a uniform solid white opaque coverage on all exposed concrete surfaces (equal to a white sheet of typing paper). Some Mn/DOT approved curing compounds may have a base color (i.e. yellow) that cannot comply with the above requirement. In this case, provide a uniform solid opaque consistency meeting the intent of the above requirement.
- (3) If the curing compound is damaged during the curing period, immediately repair the damaged area by re-spraying.

The Engineer will approve the airless spraying machine for use if it is equipped with the following:

- (1) A re-circulating bypass system that provides for continuous agitation of the reservoir material,
- (2) Separate filters for the hose and nozzle, and
- (3) Multiple or adjustable nozzle system that provides for variable spray patterns.

If the Engineer determines that the initial or corrective spraying may result in unsatisfactory curing, the Engineer may require the Contractor to use the blanket curing method, at no additional cost to the Department.

#### **C3a(2) Curing Blanket Method**

After completion of the finishing operations and without marring the concrete, cover the concrete with curing blankets. Install in a manner that envelops the exposed concrete and prevents loss of water vapor. After the concrete has cured, apply membrane curing compound to the concrete surfaces that will remain exposed in the completed work.

#### **C3b Protection Against Rain**

Protect the concrete from damage due to rain. Have available, near the site of the work, materials for protection of the edges and surface of concrete. Should any damage result, the Engineer will suspend operations until the Contractor takes corrective action and may subject the rain-damaged concrete to 1503 and 1512.

#### **C3c Protection Against Cold Weather**

If the national weather service forecast for the construction area predicts air temperatures of 34 °F [1 °C] or less within the next 24 h and the Contractor wishes to place concrete, submit a cold weather protection plan.

Protect the concrete from damage including freezing due to cold weather. Should any damage result, the Engineer will suspend operations until corrective action is taken and may subject the damaged concrete to 1503 and 1512.

#### **C3c(1) Cold Weather Protection Plan**

Submit proposed time schedule and plans for cold weather protection of concrete in writing to the Engineer for acceptance that provides provisions for adequately protecting the concrete during placement and curing. Do not place concrete until the Engineer accepts the cold weather protection plans.

S-49.3 Mn/DOT 2521.3E is hereby deleted and replaced with following:

#### **E Backfilling**

Protect newly placed concrete from damage by adjacent vibratory or backfilling operations for a minimum of 24 hours. Perform vibratory operations and backfilling 72 hours after placing the concrete or after the concrete reaches a compressive strength of at least 3,000 psi [20.7 Mpa]. The Engineer will cast, cure, and test the concrete control specimens in accordance with 2461.3G5. If damage results from any of these operations the Engineer will suspend all operations until corrective action is taken and a new method is approved. The Engineer may subject damaged concrete to 1503 and 1512.

The Contractor may hand operate concrete consolidation equipment and walk behind vibratory plate compactors 24 hours after placing the concrete, and other equipment as approved by the Engineer in conjunction with the Concrete Engineer.

After curing, backfill or perform embankment construction to the elevations shown on the plans, without damaging the concrete. Use suitable grading materials from the excavation for



backfill material in accordance with 2105, unless otherwise required by the Contract. Place and compact the backfill material in accordance with 2105.

Dispose of surplus excavated materials in accordance with 2105.

**S-49.4 Aggregate for Concrete Walk and pedestrian ramps**

The Contractor shall place a minimum of 25 mm (**1 inch**) of compacted crushed rock base under all 100mm (**4 inches**) concrete walks constructed. The Contractor shall place a minimum of 100mm (**4 inches**) of compacted crushed rock base under all (**5 – 7 inch**) concrete walks and around concrete sills constructed. Furnishing and placing the crushed rock base will be considered incidental to the walk construction and no separate payment will be made therefore.

**S-49.5 Concrete Walk Special** shall be used in the median areas. The walk shall be placed integrally (brick red color) with a brick pattern stamped on the surface. A clear protective surface sealer shall be applied as incidental to the bid item. The Contractor shall comply with the manufacturer's written instructions for preparing, handling and applying the pigments and surface sealer. Color and pattern to be approved by the Engineer.

**S-49.6 Concrete Mix No. 3A36EX** shall be used in areas where an exposed aggregate texture is specified.

**S-49.7 Measurement for concrete walk** will be made by the top surface area in square feet as specified. The measurement will be taken from the outer most edge of the concrete walk. Payment will be made under Item 2521.501 (\_\_\_" CONCRETE WALK) at the Contract bid price per square foot, which shall be payment in full for all costs involved.

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
2521.501	4" CONCRETE WALK .....	S F
2521.501	5" CONCRETE WALK .....	S F
2521.501	5" CONCRETE WALK-EXPOSED AGGREGATE .....	S F
2521.501	6" CONCRETE WALK .....	S F
2521.501	7" CONCRETE WALK .....	S F

**S-50 (2521) BITUMINOUS BIKE PATH**

Bituminous bike path shall be performed in accordance with the provisions of Mn/DOT Section 2521 Rochester Detail Plate 2-13, and 3-02 and the following:

**S-50.1 Aggregate for Bike path**

Finishing and preparing the existing crushed rock base will be considered incidental to the bike path construction and no separate payment will be made therefore.

**S-50.2 The Contractor** shall place the bituminous material in 2 (two) – 38mm (**1 ½ inch**) lifts providing bituminous tack coat between courses.

**S-50.3 Mix Designation Numbers for the bituminous bike path** are as follows:

TYPE SP 9.5 WEARING COURSE MIX (2,B) SP WE A 2 30 B

TYPE SP 12.5 NON WEAR COURSE MIX (2,B) SP NW B 2 30 B

**S-50.4 Furnishing and placing the tack coat** be considered incidental to the bike path construction and no separate payment will be made therefore.

**S-50.5 Measurement for bituminous bike path** will be made by the length at the width specified in the plans. Payment will be made under Item 2521.603 (BITUMINOUS BIKE PATH) at the Contract bid price per meter [**linear foot**], which shall be payment in full for all costs involved.



<u>ITEM</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
2521.603	BITUMINOUS BIKE PATH .....	L F

**S-51 (2531) CONCRETE CURBING**

The provisions of Mn/DOT 2531 are supplemented and/or modified with the following:

S-51.1 The last paragraph of Mn/DOT 2531.3C shall be deleted and replaced with the following:  
Longitudinal construction joints between a concrete median or gutter section and a concrete pavement shall not be sawed or sealed.

S-51.2 Mn/DOT 2531.3G is hereby modified to include the following provision:

After completing final finishing operations, cure all exposed concrete surfaces for at least 72 hours. Extend the minimum curing period to 96 hours when using fly ash or cementitious substitutions as defined in 2461.A.6. Use one of the following curing methods:

- (1) Place the membrane curing compound conforming to 3754 or 3755 within 30 minutes of concrete placement or once the bleed water has dissipated, unless the Engineer directs otherwise in accordance with 2521.3.E.1.a. Place the membrane curing compound on the edges within 30 minutes after permanent removal of the forms or curing blankets, unless the Contract requires otherwise.
- (2) Place plastic curing blankets or completely saturated burlap curing blankets as soon as practical without marring the surface in accordance with 2521.3.E.1.b.

Failure to comply with these provisions will result in the Engineer applying a monetary deduction in accordance with 1503. When there is not a separate Contract unit price for Structural Concrete, the Department will apply a monetary deduction of \$50.00 per cu. yd [\$65.00 per cu. m] or 50 percent of the Contractor-provided invoice amount for the concrete in question, whichever is less.

Whenever weather conditions are such as to cause unusual or adverse placing and finishing conditions, expedite the application of a curing method or temporarily suspend the mixing and placing operations, as the conditions require.

If necessary to remove the coverings to saw joints or perform other required work, and if the Engineer approves, remove the covering for the minimum time required to complete that work.

**G1 Curing Methods**

**G1a Membrane Curing Method**

Before application, agitate the curing compound as received in the shipping container to obtain a homogenous mixture. Protect membrane curing compounds from freezing before application. Handle and apply the membrane curing compound in accordance with the manufacturer's recommendations.

Apply the curing compound with an approved airless spraying machine in accordance with the following:

- (1) At a rate of 1 gal per 150 sq. ft (1 L per 4 m<sup>2</sup>) of surface curing area.
- (2) Apply homogeneously to provide a uniform solid white opaque coverage on all exposed concrete surfaces (equal to a white sheet of typing paper). Some Mn/DOT approved curing compounds may have a base color (i.e. yellow) that cannot comply with the above requirement. In this case, provide a uniform solid opaque consistency meeting the intent of the above requirement.
- (3) If the curing compound is damaged during the curing period, immediately repair the damaged area by re-spraying.



The Engineer will approve the airless spraying machine for use if it is equipped with the following:

- (1) A re-circulating bypass system that provides for continuous agitation of the reservoir material,
- (2) Separate filters for the hose and nozzle, and
- (3) Multiple or adjustable nozzle system that provides for variable spray patterns.

If the Engineer determines that the initial or corrective spraying may result in unsatisfactory curing, the Engineer may require the Contractor to use the blanket curing method, at no additional cost to the Department.

### **G1b Curing Blanket Method**

After completion of the finishing operations and without marring the concrete, cover the concrete with curing blankets. Install in a manner that envelops the exposed concrete and prevents loss of water vapor. After the concrete has cured, apply membrane curing compound to the concrete surfaces that will remain exposed in the completed work.

### **G2 Protection Against Rain**

Protect the concrete from damage due to rain. Have available, near the site of the work, materials for protection of the edges and surface of concrete. Should any damage result, the Engineer will suspend operations until the Contractor takes corrective action and may subject the rain-damaged concrete to 1503 and 1512.

### **G3 Protection Against Cold Weather**

If the national weather service forecast for the construction area predicts air temperatures of 34 °F [1 °C] or less within the next 24 h and the Contractor wishes to place concrete, submit a cold weather protection plan.

Protect the concrete from damage including freezing due to cold weather. Should any damage result, the Engineer will suspend operations until corrective action is taken and may subject the damaged concrete to 1503 and 1512.

#### **G3a Cold Weather Protection Plan**

Submit proposed time schedule and plans for cold weather protection of concrete in writing to the Engineer for acceptance that provides provisions for adequately protecting the concrete during placement and curing. Do not place concrete until the Engineer accepts the cold weather protection plans.

S-51.3 Mn/DOT 2531.3J is hereby deleted and replaced with the following:

#### **J Backfilling**

Protect newly placed concrete from damage by adjacent vibratory or backfilling operations for a minimum of 24 hours. Perform vibratory operations and backfilling 72 h after placing the concrete or after the concrete reaches a compressive strength of at least 3,000 psi [20.7 Mpa]. The Engineer will cast, cure, and test the concrete control specimens in accordance with 2461.3G5. If damage results from any of these operations the Engineer will suspend all operations until corrective action is taken and a new method is approved. The Engineer may subject damaged concrete to 1503 and 1512.

The Contractor may hand operate concrete consolidation equipment and walk behind vibratory plate compactors 24 hours after placing the concrete, and other equipment as approved by the Engineer in conjunction with the Concrete Engineer.

After curing, backfill or perform embankment construction to the elevations shown on the Plans, without damaging the concrete. Use suitable grading materials from the excavation for backfill

material in accordance with 2105, unless otherwise required by the Contract. Place and compact the backfill material in accordance with 2105.

Dispose of surplus excavated materials in accordance with 2105.

The spacing of contraction joints for curb and gutter shall be controlled by the proposed spacing of the transverse joints in the bituminous pavement. A contraction joint shall be provided at each transverse joint and intermediate joints shall be placed to provide intervals not greater than 10-ft (2.7m) nor less than 5-ft (1.5m).

Transverse expansion joints for curb and gutter shall be provided at 300-ft (90m) intervals as well as at structures and changes in alignment.

Metal reinforcement at catch basins shall be placed in accordance with Rochester Detail Plate 2-06. Furnishing and placing metal reinforcement shall be considered as incidental expense and no separate payment will be made therefore.

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
2531.501	CONCRETE CURB & GUTTER DESIGN B424.....	L F
2531.501	CONCRETE CURB & GUTTER DESIGN B624.....	L F
2531.501	CONCRETE CURB & GUTTER DESIGN B624 (MOD) .....	L F

**S-52 (2531) CONCRETE DRIVEWAY PAVEMENT**

Concrete walk shall be performed in accordance with the provisions of Mn/DOT Section 2531 except as modified below:

S-52.1 The Contractor shall place a minimum of **4 inches** crushed rock base under all driveways and associated sidewalk section through the driveway. Furnishing and placing the crushed rock base will be considered incidental to the pavement construction and no separate payment will be made therefore.

S-52.2 Saw cutting shall be considered incidental to concrete pavement.

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
2531.507	6" CONCRETE DRIVEWAY PAVEMENT.....	S Y
2531.507	8" CONCRETE DRIVEWAY PAVEMENT.....	S Y

**S-53 (2531) PEDESTRIAN CURB RAMP – TRUNCATED DOME SYSTEMS**

This work consists of constructing pedestrian curb ramps with Truncated Dome Systems (detectable warning surfaces) in compliance with the Public Rights-of-Way Accessibility Guidelines (PROWAG). This work shall be performed in accordance with the applicable Mn/DOT Standard Specifications, these Special Provisions, the details in the Plan, and the following:

- S-53.1 The Contractor shall select a truncated dome product from the approved products list at <http://www.dot.state.mn.us/products/miscmaterials/truncateddomes.html> . Only approved products are allowed. Stamped concrete is not allowed.
- S-53.2 City projects require U.S. Code of Federal Regulations 23CFR635.410, the "Buy American Steel and Iron Regulation", be followed.  
This is stated in the Contract Special Provision (1601) SOURCE OF SUPPLY AND QUALITY, see special provisions.
- S-53.3 The truncated dome area will be measured by the square meter [**square foot**]. Payment will be made under Item 2531.604 (Truncated Domes) at the Contract bid price per square meter or Item 2531.618 (Truncated Domes) at the Contract bid price per [**square foot**], which shall be compensation in full



---

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
2531.618	TRUNCATED DOMES.....	S F

---

**S-54 (2540) RELOCATE MAILBOXES**

Payment for item 2540.602 Relocate Mailboxes shall be compensation in full for; moving mailboxes to a temporary location during construction, coordinating that activity with the U.S. Postal Service, and then relocating the mailboxes to their permanent location in line with the new curbs, and Postal Service requirements. Mailbox posts with multiple boxes shall be paid by the number of boxes on the post. The contractor shall notify the Engineer if any mailboxes or posts are not in condition suitable to relocate. The contractor is responsible for the care and maintenance of the mailboxes and posts.

**S-54.1 Basis of Payment**

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
2540.602	RELOCATE MAIL BOX.....	EACH

**S-55 (2563) RAISED PAVEMENT MARKERS TEMPORARY (TRPMs)**

This work if necessary due to staging and concrete curing shall consist of constructing temporary raised pavement markers and the selected mounting system, placing the marker on the roadway, and removing the marker in accordance with the applicable Mn/DOT Standard Specifications and the attached specification TEMPORARY RAISED PAVEMENT MARKERS (TRPM).

**S-55.1** Payment for TRPMs shall be incidental to the Lump Sum under Item No.2563.601 (Traffic Control)

**S-56 (2564) TRAFFIC SIGNS AND DEVICES**

Traffic signs shall be constructed in accordance with the provisions of Mn/DOT 2564, except as modified below:

**S-56.1 Materials:**

**A Sign Face and Sign Legend Materials**

Sign Sheeting for Rigid Permanent Signs, Delineators and Markers shall be approved by the Engineer and be consistent with current MNDOT standards.

The retroreflective sheeting types and qualified products used for rigid permanent signs, markers and delineators can be found at: <http://www.dot.state.mn.us/trafficeng/products/MnDOTapprovedproductlist.xls>.

**B Sign Posts**

Per request from the City, the 3# U-channel sign posts typically used are to be replaced with sign posts which are to be approved by the City. Sign posts are incidental to the cost of the sign panel and to the install sign panel pay items.

**S-56.2 Construction Requirements**

The Contractor shall install Department furnished warning stickers on new Type C and Type D sign panels in accordance with Mn/DOT 2564.3H.

**A New Type C signs**

All new signs and salvaged signs shall be installed with new sign posts and use new mounting hardware. Sign locations in the plan are approximate and may be adjusted by the Engineer.

**B New Type D signs**

The 4 new ground mounted type D signs are to be located 3 feet behind the guardrail shown in the plan on new sign posts.

**C Signs included with signal Plans but paid for under signing**

In addition to the signs showing up in the signing layout sheets, the signal plan also shows several type C and D signs which are to be located at specific locations on the mast arms. Although these signs are documented and displayed in the signal plan, they are paid for under the Signing plan pay item list. All mounting hardware to mount the signs to the mast arms are incidental to the type of sign panel being installed. Signs mounted to the mastarms must be in place before the signal is turned on permanently.

**D Signs and markers used with guard rail**

Signs, markers, and delineators needed to complete guardrail installation are incidental to the guardrail pay item and not included with the rest of the signing on the project.

**S-56.3 Method of Measurement and Basis of Payment:**

Payment for sign panels type \_\_\_ at the contract price per SQUARE FOOT shall be compensation in full for all work, materials, and costs involved in performing the work as specified above and in the Plan, including furnishing and installing extruded panel sections.

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
2564.531	SIGN PANELS TYPE C.....	S F
2564.531	SIGN PANELS TYPE D.....	S F

**S-57 (2573) TEMPORARY EROSION CONTROL AND TURF ESTABLISHMENT**

Temporary Erosion Control and Turf Establishment shall be performed in accordance with the provisions of Mn/DOT Section 2573 except as modified below:

- S-57.1 Perimeter Control:** shall be installed prior grubbing to control sediment from leaving the project limits, and entering a critical resource. This work shall include furnishing, installing, and removing silt fence, or biorolls (installation of biorolls shall include staking or weighting with sandbags to prevent movement) in accordance with the details shown in the Plans and the applicable Mn/DOT Standard Specifications.
- S-57.2 Inlet Protection:** shall be furnished and installed on all inlets discharging to surface water. Inlets in rough graded areas need protection to keep any sediment from being transported to a Water of the State, or filling up the pipes with sediment. Inlet protection is shown in the plans by type; see specification 3891. Devices approved by the MN/Department's Erosion Control Engineering Unit and on file on the web under the Materials Engineering Section's Approved Products List can be furnished as meeting this specification requirement.
- S-57.3 Temporary Rock Construction Entrance** shall be installed prior to construction, to control sediment from leaving the project limits. This work shall include furnishing, installing, maintaining, and removing the entrance in accordance with the details shown in the Plans and the applicable Mn/DOT Standard Specifications.



- S-57.4 **Temporary Ditch Checks:** shall be furnished and installed on exposed ditches with a 1.5 % slope or greater. Inlet protection is shown in the plans by type; see specification 3891.
- S-57.5 **Temporary Ditch bottoms:** shall be stabilized with a Category 3 Erosion Control Blanket. This would apply when the exposed ditch bottom is left unworked for 7 days or more. Exposed ditch bottoms out letting to waters of the state need a category 3 blanket 100 feet up from the waters of the state to meet the NPDES permit requirements.
- S-57.6 **Stream Beds:** shall be stabilized down stream with Sediment Mats Class 3, per Mn/DOT 3894, and as shown in the plans. This work shall include furnishing, installing, maintaining, and removing the sediment mats in accordance with the details shown in the Plans and the applicable Mn/DOT Standard Specifications
- S-57.7 **Floatation Silt Curtain:** shall be installed along the water edge as shown in the plans. This work shall include furnishing, installing, maintaining, and removing the floatation silt curtain in accordance with the details shown in the Plans and the applicable Mn/DOT Standard Specifications

Bidders are advised that payment for furnishing and installing temporary erosion control set forth in the foregoing area is for the initial installation and removal only. Any replacement components as may be necessary to maintain the temporary erosion control devices in a functional condition, to the satisfaction of the Engineer, during the tenure of this Contract shall be furnished, installed, maintained, and removed at the Contractor's expense.

Temporary Erosion Control shall conform to all applicable requirements of the NPDES Storm Water Permit. The price bid for temporary erosion control items shall include compensation for all maintenance required to conform to NPDES Storm Water Permit requirements, and shall not be subject to the provisions of Mn/DOT 1903.

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
2573.502	SILT FENCE, TYPE HEAVY DUTY .....	L F
2573.502	SILT FENCE, TYPE MACHINE SLICED .....	L F
2573.512	TEMPORARY DITCH CHECK TYPE 2 .....	L F
2573.530	STORM DRAIN INLET PROTECTION.....	EACH
2573.602	TEMPORARY ROCK CONSTRUCTION ENTRANCE .....	EACH

**S-58 (2573) EROSION CONTROL SUPERVISOR**

This work will be done in accordance with the applicable Standard Specifications, these Special Provisions and the following:

S-58.1 Section 2573.4S is deleted and replaced by the following::

No measurement will be made of the various duties that the Erosion Control Supervisor performs or of the number of hours required, but all such work will be construed to be included in the single Lump Sum Payment under Item 2573.601 (Erosion Control Supervisor). Upon satisfactory completion of at least half of the anticipated Project duration time, the Engineer may authorize partial payment not exceeding 50 percent of the Contract bid price. Project duration time is estimated as the time between the actual Project start date and the Project completion date. The remaining percentage will be paid upon completion of the Project.

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
2573.550	EROSION CONTROL SUPERVISOR .....	LS

**S-59 (2575) PERMANENT EROSION CONTROL AND TURF ESTABLISHMENT**

The provisions of Mn/DOT 2575, 2007 Seeding Manual, and District 6 Turf Establishment and Erosion Recommendations are supplemented and/or modified with the following:

- S-59.1 **Rapid Stabilization Methods:** shall be furnished and installed on all small critical areas, to prevent off site sedimentation and/or to comply with permit requirements. The work may be performed at any time during the Contract and will be conducted on small areas that may or may not be accessible with normal equipment. This work shall be done in accordance with the applicable Mn/DOT Standard Specifications, the details shown in the Plan. **Various token amounts have been included in the plans based on different weather conditions in the staging of construction.**
- S-59.2 **Disturbed areas,** as shown in the plans, shall be sodded or seeded and mulched as soon as practical after completion of the grading operations, but within the period specified for germination of seed.
- S-59.3 **Topsoil:** Topsoil should be at a minimum of 6 inches on seeded areas and 3 inches thick on sodded areas.
- S-59.4
- S-59.5 **Agricultural Lime:** should be applied on all projects with a subsoil pH of 6.2 and/or less, at a rate of 2 tons/ acre for all seed and sod areas. According to the requirements of Mn/DOT 3879.
- S-59.6 **Sod:**  
Sodding around storm aprons, shall be according to Mn/Dot Detail Plate 9102D and shown on the Plans; According to the requirements of Mn/DOT 3878.2, B "Erosion Control Sod".  
Sodding around other areas shall be as shown on Plans; According to the requirements of Mn/DOT 3878.2, D "Mineral Sod".
- S-59.7 **Seed:**  
Seed should be installed by hydro-seeding it evenly over the areas shown in the plans. A fan-type nozzle should be used with approximately 500 gallons of water per acre. It is recommended to add approximately 75 pounds of hydromulch per 500 gallons of water for a visual tracer to ensure uniform coverage.  
Note: When seeding in conjunction with a hydraulic soil stabilizer (bonded fiber matrixes (BFM's), hydro-mulches, etc., it is recommended that a two-step operation be used. Seed should be placed first and the hydraulic soil stabilizer be applied afterwards. This is to ensure that seed comes into direct contact with the soil.  
Rates are specified in the turf establishment table for the specified mix.

**Turf Establishment Table**

	<b>Purpose</b>	<b>Mixture</b>	<b>Seeding Rate (lbs/acre)</b>	<b>Fertilizer Rate (lbs/acre)</b>
Sod	<b>Erosion Control</b>			<b>200</b>
	<b>Mineral</b>			<b>200</b>
General	Roadside	250	70	300
	Commercial Turf	260	125	300
	Residential Turf	270	150	300
Native	Ponds & Wet Area- Tall Grasses	310	82	350



	Sandy/dry Areas- Short Grasses	330	84.5	350
	<b>Sandy/dry Areas- Mid Grasses</b>	<b>340</b>	<b>84.5</b>	<b>350</b>
	General Roadside	350	84.5	350
	Sedge/Prairie Meadow	325	84	350
	Floodplain	328	88	350

The site should be harrowed, cultipacked or raked following seeding.

- S-59.8 **Fertilizer:** Type 3 Slow Release Nitrogen Fertilizer used for this project shall be 22-5-10, 80% W.I.N, 0% Cl. Rates are specified in the turf establishment table for the specified mix.
- S-59.9 **Hydraulic soil stabilizers / Mulch** Type 6 Hydraulic Soil Stabilizer applied at 3,500 pounds per acre on all seeded areas. According to the requirements of Mn/DOT 3884.
- S-59.10 **Watering:**  
The Contractor shall make, at no cost to the Owner, whatever arrangements may be necessary to insure an adequate supply of water to meet the needs of this Contract. The Contractor shall also furnish all necessary hose, equipment, attachments, and accessories for the adequate irrigation of lawns and planted areas as may be required to complete the work as specified and water used for this purpose shall be incidental to the cost of the turf establishment.
- S-59.11 **Erosion Control Blanket:** Category 3 on slopes 1:2 and steeper. Also ditch bottoms greater than 2%. Maintenance is included with the blanket see specification 2575.3 L2.
- S-59.12 **Erosion Stabilization Mats:** seeded ditches shall be stabilized with Erosion Stabilization Mat Class 3 per Mn/DOT 3888, and as shown in the plans.
- S-59.13 **Basis of Payment**

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
2575.501	SEEDING.....	ACRE
2575.502	SEED MIXTURE 340 .....	LB
2575.505	SODDING TYPE EROSION.....	S Y
2575.505	SODDING TYPE MINERAL .....	S Y
2575.523	EROSION CONTROL BLANKETS CATEGORY 3 .....	S Y
2575.525	EROSION STABILIZATION MAT CLASS 2 .....	S Y
2575.532	FERTILIZER TYPE 3 .....	LB
2575.533	AGRICULTURAL LIME .....	TON
2575.560	HYDRAULIC SOIL STABILIZER TYPE 6.....	LB
2575.571	RAPID STABILIZATION METHOD 3 .....	MGAL

#### **S-60 (2582) PERMANENT PAVEMENT MARKINGS**

The provisions of Mn/DOT 2582 are hereby modified and/or supplemented with the following:

- S-60.1 The provisions of Mn/DOT 2582.2 are hereby deleted and replaced with the following:
- A Preformed Plastic Markings for Permanent Traffic Lane Delineation and Legends.....3354
  - B Epoxy Resin Pavement Markings (Free of Toxic Heavy Metals) .....3590
  - C High Solids Water-Based Traffic Paint.....3591



D Drop-On Glass Beads ..... 3592

Qualified materials can be found on Mn/DOT's Qualified Products List on the Office of Traffic, Safety and Operations website. Other materials may be used on a provisional basis as detailed in the QPL process and as approved by the Engineer. Type of material used will be as specified by Contract Documents.

S-60.2 Mn/DOT 2582.3A2 is hereby deleted.

S-60.3 The following is hereby added to Mn/DOT 2582.3B, Application:

Any pavement markings to be grooved in shall be placed in accordance with manufacturer's instructions.

S-60.4 Mn/DOT 2582.3G is hereby deleted and replaced with the following:

Contractors applying pavement markings for Mn/DOT under a contract **are required** to fill out the "Construction Striper Operations Daily Log" form which is shown in the special provisions and as approved by the Engineer.

S-60.5 The provisions of Mn/DOT 2582.5 are hereby deleted and replaced with the following:

#### **2582.5 BASIS OF PAYMENT**

Payment for pavement markings installed at Contract prices per unit of material shall be compensation in full for all costs incurred in materials, traffic control, installation, surface preparation, use of primers, in accordance to Contract documents or as approved by the Engineer.

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
2564.531	SIGN PANELS TYPE C.....	S F
2564.531	SIGN PANELS TYPE D.....	S F
2582.501	PAVT MSSG (LT ARROW) EPOXY .....	EACH
2582.501	PAVT MSSG (RT ARROW) EPOXY .....	EACH
2582.501	PAVEMENT MESSAGE (BIKE SYMBOL) EPOXY-GROUND IN.....	EACH
2582.502	4" SOLID LINE WHITE-EPOXY (GROUND IN) .....	L F
2582.502	12" SOLID LINE WHITE-EPOXY (GROUND IN) .....	L F
2582.502	4" BROKEN LINE WHITE-EPOXY (GROUND IN) .....	L F
2582.502	4" SOLID LINE YELLOW-EPOXY ( GROUND IN) .....	L F
2582.502	4" BROKEN LINE YELLOW-EPOXY (GROUND IN) .....	L F
2582.502	4" DBLE SOLID LINE YELLOW-EPOXY (GR IN) .....	L F
2582.503	CROSSWALK MARKING-EPOXY.....	S F

#### **S-61 (3137) COARSE AGGREGATE FOR PORTLAND CEMENT CONCRETE**

Mn/DOT 3137 shall be deleted and replaced with the following:

##### **3137.1 SCOPE**

Provide coarse aggregate for use in portland cement concrete.

##### **3137.2 REQUIREMENTS**

###### **A General**

Provide coarse aggregate consisting of clean, sound, durable particles, uniform in quality, and free from wood, bark, roots, and other deleterious material.

The Engineer, in conjunction with the Concrete Engineer, may consider the following as the basis for acceptance of coarse aggregate for portland cement concrete:

- (1) Results of laboratory tests,
- (2) Behavior under natural exposure conditions,



- (3) Behavior of other portland cement concrete with aggregate from the same or similar geological formations or deposits, and
- (4) Any other tests or criteria as deemed appropriate by the Engineer, in conjunction with the Concrete Engineer.

#### **B Classification**

Provide coarse aggregate meeting the requirements of one of the following classifications:

- (1) Class A: Crushed quarry rock including quartzite, gneiss, and granite, or mine trap rock including basalt, diabase, gabbro, and other igneous rock types. Class A aggregate may contain no greater than 4.0 percent non-Class A aggregate. The Department will not allow the intentional blending or adding of non-Class A aggregate.
- (2) Class B: All other crushed quarry or mine rock types including carbonates, rhyolite, and schist.
- (3) Class C: Natural or partly crushed gravel obtained from a natural gravel deposit.
- (4) Class D: Mixture of at least two classes of coarse aggregate. The Engineer, in conjunction with the Concrete Engineer, will determine the suitability of the Class D aggregate for the proposed use including proportioning.
- (5) Class R: Aggregate obtained from recycling concrete. The Engineer, in conjunction with the Concrete Engineer, will determine the suitability of the Class R aggregate for the proposed use including proportioning.

#### **C Washing**

Wash Class B, Class C, Class D, and Class R coarse aggregate. Wash Class A aggregate as needed to comply with the requirements of Table 3137-1.

#### **D Quality**

Quality requirements are based on each individual aggregate fraction unless otherwise allowed by the Engineer, in conjunction with the Concrete Engineer with the exception of the following:

- (1) When 100 percent of the fractions from a single source pass the 1 in [25 mm] sieve, quality requirements are based on the composite value of the combined aggregates.
- (2) When less than 100 percent of the fractions from a single source pass the 1 inch [25 mm] sieve:
  - (a) Those fractions passing the 1 inch [25 mm] sieve are combined and based on the composite value;
  - (b) The fractions greater than or equal to 1 inch [25 mm] are based on each individual aggregate fraction.

#### **D1 Coarse Aggregate for General Use**

Provide coarse aggregate for general use concrete in accordance with Table 3137-1.

Table 3137-1 Coarse Aggregate for General Use		
Quality Test		Maximum Percent by Weight
(a)	Shale:	
	Fraction retained on the ½ in [12.5 mm] sieve	0.4
	Fraction retained on the No. 4 [4.75 mm] sieve, as a percentage of the total material	0.7
(b)	Soft iron oxide particles (paint rock and ochre)	0.3
(c)	Total spall materials*:	
	Fraction retained on the ½ in [12.5 mm] sieve	1.0
	Fraction retained on the No. 4 [4.75 mm] sieve, as a percentage of the total material	1.5
(d)	Soft particles	2.5
(e)	Clay balls and lumps	0.3
(f)	Sum of (c) total spall materials, (d) soft particles, and (e) clay balls and lumps†	3.5
(g)	Slate	3.0
(h)	Flat or elongated pieces‡	15.0
(i)	Quantity of material passing No. 200 [75 µm] sieve:	
	Class A and Class B aggregates#	1.5
	Class C and Class D aggregates§	1.0
(j)	Los Angeles Rattler, loss on total sample	40.0
(k)	Soundness of magnesium sulfate**	15.0
<p>* Includes the percentages retained by shale and soft iron oxide particles, plus other iron oxide particles, unsound cherts, pyrite, and other materials with similar characteristics.</p> <p>   Exclusive of shale, soft iron oxide particles, and total spall materials.</p> <p>† Sum of the total spall materials, soft particles, and clay balls and lumps. For total spall materials, use the percent in the total sample retained on the No. 4 [4.75 mm] sieve.</p> <p>‡ Thickness less than 25 percent of the maximum width. Length greater than 3 times the maximum width.</p> <p># Each individual fraction at the point of placement consists of dust from the fracture and free of clay or shale.</p> <p>§ For each individual fraction at the point of placement.</p> <p>** Loss at 5 cycles for any fraction of the coarse aggregate. Do not blend materials from multiple sources to obtain a fraction meeting the sulfate soundness requirement.</p>		

## D2 Coarse Aggregate for Bridge Superstructure

Provide coarse aggregate in accordance with 3137.2D1 except as modified by Table 3137-2 for use in the following:

- (1) Bridge superstructure (deck, railing, posts, curbs, sidewalks, and median strips);
- (2) Approach panels; and
- (3) Precast concrete panel facings for Mechanically Stabilized Earth walls.



Table 3137-2 Coarse Aggregate for Bridge Superstructure		
Quality Test		Maximum Percent by Weight
(a)	Shale:	
	Fraction retained on the ½ in [12.5 mm] sieve	0.2
	Fraction retained on the No. 4 [4.75 mm] sieve as a percentage of the total material	0.3
(b)	Soft iron oxide particles (paint rock and ochre)	0.2
(c)	Total spall materials*:	
	Fraction retained on the No. 4 [4.75 mm] sieve as a percentage of the total material	0.5
(d)	Soft particles	2.5
(e)	Clay balls and lumps	0.3
(f)	Sum of (c) total spall materials, (d) soft particles, and (e) clay balls and lumps, use the percent in the total sample retained on the No. 4 [4.75 mm] sieve	3.0
(g)	Absorption for Class B aggregate	1.75
(h)	Carbonate in Class C and Class D aggregates by weight	30.0
* Includes the percentages retained by shale and soft iron oxide particles, plus other iron oxide particles, unsound cherts, pyrite, and other materials with similar characteristics.		
Exclusive of shale, soft iron oxide particles, and total spall materials.		
† Sum of the total spall materials, soft particles, and clay balls and lumps. For total spall materials, use the percent in the total sample retained on the No. 4 [4.75 mm] sieve.		

### D3 Coarse Aggregate for Concrete Pavement

Provide coarse aggregate in accordance with 3137.2D1, except as modified by Table 3137-3, for use in the following:

- (1) Concrete pavement, and
- (2) Concrete pavement rehabilitation.

Table 3137-3 Coarse Aggregate for Concrete Pavement		
Quality Test		Maximum Percent by Weight
(a)	Absorption for Class B aggregate	1.75
(b)	Carbonate in Class C aggregate by weight	30.0

### E Gradation

Provide coarse aggregate in accordance with Table 3137-4 including all sizes within the specified limits. The Department defines coarse aggregate as the uniform product of the producing plant, unless some sizes are removed to meet the gradation requirements. Do not use broken or noncontinuous gradations.

If the coarse aggregate has less than 100 percent passing the 1 in [25 mm] sieve, proportion the coarse aggregate using at least two fractions. Gradation requirements are based on the composite value of the combined coarse aggregates.

<b>Table 3137-4</b> <b>Coarse Aggregate Designation for Concrete,</b> <b>percent by weight passing square opening sieves</b>									
Aggregate	2 in [50 mm]	1½ in [37.5 mm]	1¼ in [31.5 mm]	1 in [25.0 mm]	¾ in [19.0 mm]	½ in [16.0 mm]	¼ in [12.5 mm]	¾ in [9.5 mm]	No.4 [4.75 mm]
CA-00	—	—	—	100	95 – 100	—	—	—	0 – 10
CA-15	100	95 – 100	—	—	35 – 65	—	—	5 – 25	0 – 7
CA-25	100	95 – 100	—	—	50 – 80	—	—	20 – 40	0 – 7
CA-35	—	100	95 – 100	—	55 – 85	—	—	20 – 45	0 – 7
CA-45	—	—	100	95 – 100	65 – 95	—	—	25 – 55	0 – 7
CA-50	—	—	—	100	85 – 100	—	—	30 – 60	0 – 12
CA-60	—	—	—	—	100	85 – 100	—	40 – 70	0 – 12
CA-70	—	—	—	—	—	100	85 – 100	50 – 100	0 – 25
CA-80*	—	—	—	—	—	—	—	100	55 – 95

\* Do not allow greater than 5 percent to pass the No. 50 [300 µm] sieve.

If producing Class R aggregate, remove reinforcing steel from the concrete and any concrete material passing the No 4 [4.75 mm] sieve.

### 3137.3 SAMPLING AND TESTING

Sample and test coarse aggregate fractions separately in accordance with Table 3137-5.

<b>Table 3137-5</b> <b>Preliminary Coarse Aggregate Testing</b>	
Aggregate	Notification and Testing Requirement
New source	Notify the Engineer at least 1 month before use. Perform new source concrete aggregate testing in accordance with the procedure on the Department's website.
Previously tested aggregate	Notify the Engineer at least 2 weeks before use. Perform additional testing as directed by the Engineer, in conjunction with the Concrete Engineer.



Sample and test coarse aggregate in accordance with Table 3137-6.

Table 3137-6 Coarse Aggregate Test Methods	
Test	Testing Method
Sampling	Mn/DOT Concrete Manual
Sieve analysis	Mn/DOT Concrete Manual
Shale test	Mn/DOT Laboratory Manual 1207
Quantity of material passing the No. 200 [75 µm] sieve	Mn/DOT Concrete Manual
Specific gravity and absorption	Mn/DOT Laboratory Manual 1204
Density	AASHTO T 19 or Mn/DOT Laboratory Manual 1211
Los Angeles Rattler loss	AASHTO T 96
Void content	AASHTO T 19* or Mn/DOT Laboratory Manual 1211
Deleterious materials	Mn/DOT Laboratory Manual 1209
Soundness; magnesium sulfate	Mn/DOT Laboratory Manual 1219
Soft particles	Mn/DOT Laboratory Manual 1218
Flat or elongated pieces	ASTM D 4791
Clay balls or lumps	Mn/DOT Concrete Manual
* Base the void content on an oven-dry and compacted-by-rodding condition of the aggregate and a value of 62.4 lb per cu. ft [1,000 kg per cu. m] for water.	

#### **S-62 (3138) AGGREGATES FOR SURFACE AND BASE COURSES**

The provisions of Mn/DOT 3138 are hereby modified as follows:

- S-62.1 If crushed carbonate quarry rock (limestone or dolostone) is used, the minus 75 µm [#200] sized portion of the rock insoluble residue shall not exceed 10% by weight for Base Course and Shoulder Aggregate only. The insoluble residue test procedure is on file in the Mn/DOT Materials Laboratory.
- S-62.2 Blending of sources and/or beds with an insoluble residue up to 15% is allowed to meet the 10% insoluble residue requirement. Individual beds thinner than 150 mm [6 inches] up to 5% of the total face height, are exempt from the 15% maximum insoluble residue requirement. However, the aggregate producer shall practice good quality control at all times and exclude poor quality stone to the extent practical, regardless of the bed thickness and/or pocket size and location.
- S-62.3 No carbonate quarry rock from the Platteville Geological Formation is allowed.
- S-62.4 The second paragraph of Mn/DOT 3138.2B Gradation Tables 3138-1 and 2, is revised to read as follows:

If Class 7 is substituted for Classes 1, 3, 4, 5, or 6, it shall meet the gradation requirements of the substituted class (Table 3138-1); except that, for Class 5 and 6, up to 5 percent by mass (**weight**) of the total composite mixture may exceed 25.0 mm (**1 inch**) sieve but 100 percent must pass the 37.5 mm (**1.5 inch**) sieve. Surfacing aggregate mixtures containing salvaged materials shall meet the gradation requirements of the materials specified in the Plan. All gradations will be run on the composite mixture before extraction of the bituminous material.

S-62.5 TABLE 3138-1 in Mn/DOT 3138.2B Gradation Tables 3138-1 and 2, is hereby deleted and replaced with the following:

**TABLE 3138-1**  
**BASE AND SURFACING AGGREGATE**  
**Total Percent Passing**

Sieve Size	Class 1 (A)	Class 2	Class 3 (A)	Class 4 (A)	Class 5 (A) (B)	Class 6 (A) (B)
75 mm (3 inches)	--	--	--	--	--	--
50 mm (2 inches)	--	--	100	100	--	--
37.5 mm (1½ inches)	--	--	--	--	--	--
25.0 mm (1 inch)	--	--	--	--	100	100
19.0 mm (¾ inch)	100	100	--	--	90-100	90-100
9.5 mm (¾ inch)	65-95	65-90	--	--	50-90	50-85
4.75 mm (No. 4)	40-85	35-70	35-100	35-100	35-80	35-70
2.00 mm (No. 10)	25-70	25-45	20-100	20-100	20-65	20-55
425 µm (No. 40)	10-45	12-30	5-50	5-35	10-35	10-30
75 µm (No. 200)	8.0-15.0	5.0-13.0	5.0-10.0	4.0-10.0	3.0-10.0	3.0-7.0

- (A) When salvaged materials are substituted for another class of aggregate, it shall meet the gradation requirements of the class being replaced except as amended in 3138.2 B.
- (B) The gradation requirements for aggregates containing 60% or more crushed quarry rock may be amended with the concurrence of the Project Engineer and the Grading and Base Engineer.

S-62.6 The fifth paragraph of Mn/DOT 3138.3 Sampling and Testing, is revised to read as follows:  
The stockpile shall be sampled at the rate of one field gradation test per 1,000 metric tons (**tons**) of aggregate used on the Project.



---

**S-63 (3139) (D6) GRADED AGGREGATE FOR BITUMINOUS MIXTURES**

Mn/DOT 3139 is hereby deleted and replaced with the following:

**3139 Graded Aggregate for Bituminous Mixtures**

**3139.1 Scope**

Provide graded aggregate for use in bituminous mixtures.

**3139.2 PLANT MIXED ASPHALT Requirements**

**A Composition**

Provide graded aggregate composed of any combination of the following sound durable particles as described in 3139.2B.

Do not use graded aggregate containing objectionable materials including:

- (1) Metal,
- (2) Glass,
- (3) Wood,
- (4) Plastic,
- (5) Brick, or
- (6) Rubber.

Provide coarse aggregate free of coatings of clay and silt.

Do not add soil materials such as clay, loam, or silt to compensate for a lack of fines in the aggregate.

Do not blend overburden soil into the aggregate.

Feed each material or size of material from an individual storage unit at a uniform rate.

Do not place blended materials from different sources, or for different classes, types, or sizes together in one stockpile unless approved by the Engineer as a Class E aggregate.

**B Classification**

**B.1 Class A**

Provide crushed igneous bedrock consisting of basalt, gabbro, granite, gneiss, rhyolite, diorite, and andosite. Rock from the Sioux Quartzite Formation may contain no greater than 4.0 percent non-Class A aggregate. Do not blend or add non-Class A aggregate to Class A aggregate.

**B.2 Class B**

Provide crushed rock from other bedrock sources such as carbonate and metamorphic rocks (Schist).

**B.3 Class C**

Provide natural or partly crushed natural gravel obtained from a natural gravel deposit.

**B.4 Class D**

Provide 100 percent crushed natural gravel produced from material retained on a square mesh sieve with an opening at least twice as large as Table 3139-2 allows for the maximum size of the aggregate in the composite asphalt mixture. Ensure the amount of carryover, material finer than the selected sieve, no greater than 10 percent of the Class D aggregate by weight.

**B.5 Class E**

Provide a mixture consisting of at least two of the following classes of approved aggregate:

- (1) Class A,



(2) Class B, and

(3) Class D.

#### **B.6 Steel Slag**

Steel slag cannot exceed 25% of the total mixture aggregate and be free from metallic and other mill waste. The Engineer will accept stockpiles if the total expansion is no greater than 0.5 percent as determined by ASTM D 4792

#### **B.7 Taconite Tailings**

Obtain taconite tailings from ore mined westerly of a north-south line located east of Biwabik, Minnesota (R15W-R16W) or from ore mined in southwestern Wisconsin.

#### **B.8 Recycled Asphalt Shingles (RAS)**

Provide recycled asphalt shingles manufactured from waste scrap asphalt shingles (MWSS) or from tear-off scrap asphalt shingles (TOSS). Consider the percentage of RAS used as part of the maximum allowable Recycled Asphalt Pavement (RAP) percentage. See Table 3139-3.

##### **B.8.A RAS Gradation.....Mn/DOT Laboratory Procedure 1801**

Provide RAS in accordance with the following gradation requirements:

<b>Table 3139-1 RAS Gradation</b>	
<b>Sieve size</b>	<b>Percent passing</b>
½ in [12.5 mm]	100
No. 4 [4.75 mm]	90

##### **B.8.B Binder Content**

Determine the binder content using chemical extraction meeting the requirements of Mn/DOT Lab Procedure 1851 or 1852.

##### **B.8.C Bulk Specific Gravity**

The Contractor may use an aggregate bulk specific gravity (Gsb) of 2.650 in lieu of determining the shingle aggregate Gsb in accordance with Mn/DOT Lab Procedure 1205.

##### **B.8.D Waste Materials**

Do not allow extraneous materials including metals, glass, rubber, nails, soil, brick, tars, paper, wood, and plastics greater than 0.5 percent by weight of the graded aggregate as determined by material retained on the No. 4 [4.75 mm] sieve as specified in Mn/DOT Laboratory Procedure 1801.

##### **B.8.E Stockpile**

Do not blend an RAS stockpile with other salvage material. Do not blend MWSS and TOSS. The Contractor may blend virgin sand material with RAS to minimize agglomeration if the Contractor accounts for the blended sand in the final mixture gradation.

##### **B.8.F Certification**

Ensure the processor provides RAS certification on the following Department form "Scrap Asphalt Shingles from Manufacture Waste" or "Tear-Off Scrap Asphalt Shingles" at [www.dot.state.mn.us/materials/bituminous.html](http://www.dot.state.mn.us/materials/bituminous.html).

#### **B.9 Crushed Concrete and Salvaged Aggregate**

The Contractor may incorporate no greater than 50 percent of crushed concrete and salvaged aggregate in non-wear mixtures. Do not use crushed concrete in wearing courses.

#### **B.10 Ash**



Sewage sludge ash and waste incinerator ash are allowed as an aggregate source at a maximum of 5% of the total weight of the mixture. Only use sewage sludge ash meeting the requirements of the Tier II hazard evaluation criteria as approved by the Engineer with concurrence with Mn/DOT's Environmental Assessment Engineer in the mixture. Only use waste incinerator ash sources approved by the Engineer with concurrence with Mn/DOT's Environmental Assessment Engineer.

#### **B.11 Recycled Asphalt Pavement (RAP)**

##### **B.11.A Aggregate Angularity**

Provide combined RAP and virgin aggregates that meet the composite coarse and fine aggregate angularity for the mixture being produced.

##### **B.11.B Objectionable Material**

Do not use RAP containing objectionable materials including metal, glass, wood, plastic, brick, or rubber.

##### **B.11.C Asphalt Binder Content**

Determine the asphalt binder content using the Mn/DOT Lab Manual Method 1851 and 1852.

##### **B.11.D Bulk Specific Gravity**

Determine the bulk specific gravity in accordance with Mn/DOT Laboratory Procedure 1205 or 1815.

#### **C Quality**

##### **C.1 Los Angeles Rattler Test ..... Mn/DOT Laboratory Procedure 1210**

Ensure a coarse aggregate loss no greater than 40 percent.

##### **C.2 Soundness (Magnesium Sulfate) ..... Mn/DOT Laboratory Procedure 1219**

Maximum loss after 5 cycles on the coarse aggregate fraction (material retained on No. 4 [4.75 mm] sieve for any individual source within the mix) as follows:

- (1) Percent passing the  $\frac{3}{4}$  in [19 mm] sieve to percent retained on the  $\frac{1}{2}$  in [12.5 mm] sieve,  $\leq 14\%$ ,
- (2) Percent passing the  $\frac{1}{2}$  in [12.5 mm] sieve to percent retained on the  $\frac{3}{8}$  in [9.5 mm] sieve,  $\leq 18\%$ ,
- (3) Percent passing the  $\frac{3}{8}$  in [9.5 mm] sieve to percent retained on the No. 4 [4.75 mm] sieve,  $\leq 23\%$ ,
- (4) For the composite if all three size fractions are tested, the composite loss  $\leq 18\%$ , and acceptance will be granted if:
  - (4.1) If the Contractor meets the composite requirement, but fails to meet at least one of the individual components, the Engineer may accept the source if each individual component is no greater than 110 percent of the requirement for that component.
  - (4.2) If the Contractor meets each individual component requirement, but fails to meet the composite, the Engineer may accept the source if the composite is no greater than 110 percent of the requirement for the composite.

Coarse aggregate that exceeds the requirements in this section for material passing the No. 4 [4.75 mm] sieve cannot be used.

##### **C.3 Spall Materials and Lumps ..... Mn/DOT Laboratory Procedure 1219**

Stop asphalt production if the percent of spall or lumps measured in the stockpile or cold feed exceeds the values listed in Table 3139-3. Determine lump compliance by dry batching.

**C.4 Insoluble Residue Test.....Mn/DOT Laboratory Procedure 1221**

If crushed carbonate quarry rock (limestone or dolostone) is used the minus 75  $\mu$ m [#200] sized portion of the rock insoluble residue shall not exceed 10% by weight. The insoluble residue test procedure is on file in the Mn/DOT Materials Laboratory.

Blending of sources and/or beds with an insoluble residue up to 15% is allowed to meet the 10% insoluble residue requirement. Individual beds thinner than 150 mm [6 inches] up to 5% of the total face height, are exempt from the 15% maximum insoluble residue requirement. However, the aggregate producer shall practice good quality control at all times and exclude poor quality stone to the extent practical, regardless of the bed thickness and/or pocket size and location.

No carbonate quarry rock from the Platteville Geological Formation is allowed.

**D Gradation**

Ensure the aggregate gradation broad bands meet the following requirements in accordance with AASHTO T-11 (passing the No. 200 [75  $\mu$ m] wash) and AASHTO T-27.

<b>Table 3139-2</b>				
<b>Aggregate Gradation Broad Bands (percent passing of total washed gradation)</b>				
<b>Sieve size</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
1 in [25.0 mm]	—	—	100	—
¾ in [19.0 mm]	—	100*	85 – 100	—
½ in [12.5 mm]	100*	85 – 100	45 – 90	—
¾ in [9.5 mm]	85 – 100	35 – 90	—	100
No. 4 [4.75 mm]	25 – 90	30 – 80	30 – 75	65 – 95
No. 8 [2.36 mm]	20 – 70	25 – 65	25 – 60	45 – 80
No. 200 [0.075 mm]	2.0 – 7.0	2.0 – 7.0	2.0 – 7.0	3.0 – 8.0
* The Contractor may reduce the gradation broadband for the maximum aggregate size to 97 percent passing for mixtures containing RAP, if the oversize material originates from the RAP source. Ensure the virgin material meets the requirement of 100 percent passing the maximum aggregate sieve size.				

<b>Table 3139-3</b>				
<b>Mixture Aggregate Requirements</b>				
<b>Aggregate Blend Property</b>	<b>Traffic Level 2</b>	<b>Traffic Level 3</b>	<b>Traffic Level 4</b>	<b>Traffic Level 5</b>
20 year Design ESAL's	<1 million	1 - 3 million	3 - 10 million	10 – 30 million
Min. Coarse Aggregate Angularity (ASTM D5821)				
(one face / two face), %- Wear	30/-	55 / -	85 / 80	95 / 90
(one face / two face), %- Non-Wear	30/-	55 / -	60 / -	80 / 75



Min. Fine Aggregate Angularity (FAA) (AASHTO T304, Method A) %- Wear	40	42	44	45
%-Non-Wear	40	40	40	40
Flat and Elongated Particles, max % by weight, (ASTM D 4791)	-	10 (5:1 ratio)	10 (5:1 ratio)	10 (5:1 ratio)
Min. Sand Equivalent (AASHTO T 176)	-	-	45	45
Max. Total Spall in fraction retained on the #4 [4.75mm] sieve – Wear	5.0	2.5	1.0	1.0
Non-Wear	5.0	5.0	2.5	2.5
Maximum Spall Content in Total Sample – Wear	5.0	5.0	1.0	1.0
Non-Wear	5.0	5.0	2.5	2.5
Maximum Percent Lumps in fraction retained on the #4 [4.75mm] sieve	0.5	0.5	0.5	0.5
Class B Carbonate Restrictions				
Maximum% -#4 [-4.75mm] Final Lift/All other Lifts	100/100	100/100	80/80	50/80
Maximum% +#4 [+4.75mm] Final Lift/All other Lifts	100/100	100/100	50/100	0/100
Max. allowable scrap shingles–MWSS <sup>(1)</sup> Wear/Non Wear	5/5	5/5	5/5	5/5
Max. allowable scrap shingles –TOSS <sup>(1)</sup> Final Lift/All other Lifts	5/5	5/5	0/5	0/0

(1) MWSS is manufactured waste scrap shingle and TOSS is tear-off scrap shingle.

### 3139.3 Permeable Asphalt Stabilized Stress Relief Course (PASSRC) and Permeable Asphalt Stabilized Base (PASB) Requirements

#### A Restrictions

Do not use recycled materials including glass, concrete, bituminous, shingles, ash, and steel slag.

#### B Gradation

The Gradation limits are also considered the Job Mix Formula (JMF) limits.

#### B.1 PASB

Table 3139-4 PASB Aggregate Gradation	
Sieve Size	Percent Passing
1 ½ inch [37.5 mm]	100
1 inch [25.0 mm]	95 - 100
¾ inch [19.0 mm]	85 - 95
3/8 inch [9.5 mm]	30 - 60
No. 4 [4.75 mm]	10 - 30
No. 8 [2.36 mm]	0 - 10
No. 30 [600 µm]	0 - 5
No. 200 [75 µm]	0 - 3

**B.2 PASSRC**

Table 3139-5 PASSRC Aggregate Gradation	
Sieve Size	Percent Passing
5/8 inch [16.0 mm]	100
1/2 inch [12.5 mm]	85 - 100
3/8 inch [9.5 mm]	50 - 100
No. 4 [4.75 mm]	0 - 25
No. 8 [2.36 mm]	0 - 5

**C Quality**

Requirements will meet all of 3139.2.C.

**D Mixture Quality Requirements**

Table 3139-6 Mixture Aggregate Requirements for PASSRC & PASB	
Aggregate Blend Property	
<b>Coarse Aggregate Angularity</b> (ASTM D5821) (one face/two face) % PASSRC <sup>(1)</sup> PASB <sup>(1)</sup>	95/- -/65
Fine Aggregate Angularity (FAA) (AASHTO T304, Method A) %	NA
Flat and Elongated Particles, max(2) % by weight, (ASTM D 4791)	NA
Clay Content (2) (AASHTO T 176)	NA
Total Spall in fraction retained on the 4.75mm [#4] sieve	3.0
Maximum Spall Content in Total Sample	5.0
Maximum Percent Lumps in fraction retained on the 4.75mm [#4] sieve	0.5



- (1) Carbonate Restrictions: If Class B (as defined in 3139.2.B.2), crushed carbonate quarry rock (limestone or dolostone), is used in the mixture, or if carbonate particles in the material retained on the 4.75 mm [No. 4] sieve exceeds 55 percent, by weight, the minus 0.075 mm [# 200] sieve size portion of the insoluble residue shall not exceed 10 percent.

#### 3139.4 Ultra Thin Bonded Wearing Course (UTBWC) Requirements.

##### A. Restrictions

Do not use recycled materials including glass, concrete, bituminous, shingles, ash, and steel slag.

##### B. Coarse Aggregate

Provide a Class A aggregate, as defined in 3139.2.B.1, in accordance with the following requirements:

Table 3139-7 UTBWC Coarse Aggregate Requirements		
Tests	Mn/DOT Laboratory Manual Method	Limit, %
Flat and elongated ratio at 3:1	1208	≤ 25
Los Angeles Rattler Test (LAR)	1210	≤ 40
Bulk Specific Gravity	1204	

##### C. Fine Aggregate

Provide fine aggregate, passing the No. 4 [4.75 mm] sieve in accordance with the following requirements:

Table 3139-8 Fine Aggregate Requirements		
Tests	Method	Limit, %
Sand equivalent*	AASHTO T 176	≥ 45
Uncompacted void content	Mn/DOT Laboratory Manual 1206	≥ 40
Bulk Specific Gravity	Mn/DOT Laboratory Manual 1205	

#### 3139.5 SAMPLING AND TESTING

Perform sampling, sieve analysis, lumps, crushing, and shale testing meeting the requirements of the Mn/DOT Laboratory Manual.

#### **S-64 (3590) EPOXY RESIN PAVEMENT MARKINGS (FREE OF TOXIC HEAVY METALS)**

The provisions of Mn/DOT 3590.3 are hereby deleted and replaced with the following:

##### 3590.3 Specific Requirements

##### A Epoxy Resin Material

The material shall be composed of epoxy resins and pigments only. No solvents are to be given off to the environment upon application to a pavement surface.

The composition shall be within the tolerance permitted for the product tested and approved by Mn/DOT. Type II material shall be completely free of TMPTA (Tri-Methyol Propane Tri Acrylate) and other multi-functional monomers.

All materials shall be free of lead, cadmium, mercury, hexavalent chromium and other toxic heavy metals as defined by the United States Environmental Protection Agency.

Color:

The color of the white epoxy shall be a pure flat white, free of tints. The color of the yellow epoxy shall closely match Color Number 33538 of Federal Standard 595 and shall conform to the following CIE Chromaticity limits using illuminant "C":

x | 0.470 | 0.485 | 0.520 | 0.480

y | 0.440 | 0.460 | 0.450 | 0.420

Daylight Directional Reflectance (Y), white, minimum 83

Daylight Directional Reflectance (Y), yellow, minimum 50

Testing will be according to:

Daylight Directional Reflectance..... ASTM D 2805

Color ..... ASTM D 2805

#### Adhesion Capabilities:

When the adhesion of the material to portland cement concrete (the concrete shall have a minimum of 2 070 kPa [**300 psi.**] tensile strength) is tested according to American Concrete Institute Committee 403 testing procedure, the failure of the system must take place in the concrete. The concrete shall be 32°C [**0°F**] when the material is applied, after which the material shall be allowed to cure for 72 hours at 23 ± 2°C [**73 ± 36° F**].

#### Abrasion Resistance:

When the abrasion resistance of the material is tested according to ASTM C 501 with a CS-17 wheel under a load of 1000 grams for 1000 cycles, the wear index shall be no greater than 82. (The wear index is the weight in milligrams that is abraded from the sample under the test conditions).

#### Hardness:

The Type D durometer hardness of the material shall be not less than 75 nor more than 90 when tested according to ASTM D2240 after the material has cured for 72 hours at 23 ± 2°C [**73 ± 36° F**].

#### Tensile Strength:

The tensile strength of the material, when tested according to ASTM D 638, shall not be less than 41 370 kPa [**6,000 psi.**] after 72 hours cure at 23 ± 2°C [**73 ± 36° F**].

#### Compressive Strength:

The compressive strength of the material, when tested according to ASTM D 695, shall not be less than 82,700 kPa [**12,000 psi.**] after 72 hours cure at 23±2°C [**73 ± 36° F**].

#### Thickness:

The epoxy pavement marking wet film thicknesses shall be a minimum of 380 µm [**15 mil**] on all pavement surfaces. For the Spec 2360 SUPERPAVE wearing courses the epoxy pavement marking wet film thicknesses shall be increase from a minimum of 380 µm [**15 mil**] to a minimum thickness of 508 µm [**20 mil**] wet film.

#### B Glass Beads

Glass beads shall meet the requirements of AASHTO M247, Type I, and:

- a. Coatings -- the beads shall be treated according to the manufacturers recommendations and meet the requirements of Section 4.4.2 of M247, and
- b. Roundness-- the beads shall have a roundness of at least 80%.

For 380 µm [**15 mil**] applications, glass beads shall be applied at a rate of at least 3.0 kg/L [**25 pounds per gallon**]. A greater bead application rate may be necessary for meeting the performance criteria (minimum levels of retroreflectivity). This will require Contractors to consult with all the material manufacturers.

#### Time to No-Track:



Type I material shall be in "no-tracking" condition in 15 minutes or less and within 45 minutes for Type II material. The "no-tracking" condition shall be determined on an application of specified thickness to the pavement and covered with glass beads at the rate of at least 3.0 kg/L [**25 pounds per gallon**]. The lines for this test shall be applied with striping equipment operated so as to have the material at manufacturer's recommended application temperature. This maximum "no-tracking" time shall not be exceeded when the pavement temperature varies from 10 to 49° C [**50 to 120° F**] and under all humidity conditions, providing the pavement is dry. The no-tracking time shall be determined by passing over the line with a passenger car or pickup truck at a speed of 40 to 55 km/hr [**25 to 35 mph**] in a simulated passing maneuver. A line showing no visual deposition of the material to the pavement surface when viewed from a distance of 15 m [**50 feet**] shall be considered as showing "no-tracking" and conforming to this requirement for time to "no-track."

#### **S-65 (3236) REINFORCED CONCRETE PIPE**

The provisions of Mn/DOT 3236 are modified and/or supplemented with the following:

S-65.1 Manufacturers of reinforced concrete pipe may produce an alternate "offset joint" on the spigot end of the pipe. This type of offset joint is to be used with the profile or prelubricated pipe seal systems. See Mn/DOT Standard Plate 3006.

S-65.2 The first paragraph of Mn/DOT 3236.2A3 is hereby deleted and replaced with the following:  
Cement substitutions as addressed in 2461.3D are hereby modified as follows to allow:

- (a) 30 percent Class F or Class C fly ash by weight
- (b) 35 percent ground granulated blast furnace slag by weight
- (c) 35 percent substitution with a combination of ground granulated blast furnace slag and Type F or Type C fly ash by weight

All other provisions of 2461.3D shall apply. The use of admixtures shall conform to 2461.3E.

#### **S-66 (3876) SEED**

The provisions of Mn/DOT 3876 are supplemented and/or modified with the following:

S-66.1 The second paragraph of Mn/DOT 3876.1 is hereby deleted and replaced with the following:

Pure live seed (PLS) is the percent of seed germination plus dormant and/or hard seed times the percent of seed purity of each species divided by 100.

S-66.2 Mn/DOT 3876.2A General Requirements is hereby deleted and replaced with the following:

##### **A General Requirements**

All seed lots shall conform to the latest seed law of the State (Minnesota Statutes 21.80-21.91, last revised 8/2/06), and any applicable federal regulations, including those governing labeling and weed seed tolerances. Seed lots sold or offered for sale in the state of Minnesota are subject to inspection, sampling, and testing for verification of label claims and compliance with the Minnesota Seed Law by the Department of Agriculture (M.S. 18J.04). Tolerances for germination and purity factors will be applied as established in Rules 1510.0050, 1510.0060, 1510.0070, 1510.0080, 1510.0090 and 1510.0100 to seed lots sampled and tested by official methods. For all seed used in Mn/DOT mixes or projects, tests for viability (including germination and TZ tests) are valid for 12 months from the test date, exclusive of the month the test was completed. Seed shall be installed while tests are still valid.

All legume seed, including native legumes, shall have been pre inoculated with the proper bacterial culture for the species being inoculated and with the bacteria culture designed for this purpose (pre-inoculation), in the manner and within the time specified by the manufacturer.



#### **A1 Labeling**

Contractor shall supply seed that is labeled according to the labeling requirements for agricultural seed as set forth in the Minnesota Seed Law, section 21.82. The contractor shall supply seed that also contains the following information:

- a) County of genetic origin for each native component (List at least two counties for germplasm comprising accessions from multiple counties)
- b) PLS percent for each mix component (Purity x Total Germination and Hard or Dormant Seed/100) for each mix component **(For PLS component of mix's)**
- c) Total PLS weight for the bag. The tag shall identify this as the pay item. **(For PLS component of mix's)**
- d) Total bulk weight for the bag
- e) Area covered by the amount of seed in the bag when applied at the rate specified for the mix
- f) All information pertaining to individual components in a mix is required for all components, including those that constitute less than 5% of the total mix.

Tags must not be hand written. If any of the above mentioned information is not included on the tag the material will be subject to specification 1503. When multiple bags are required to keep certain species or groups of species separate for the purpose of seeding those bags may be placed inside of a larger bag as long as each bag is labeled separately and the outer bag is labeled with the name of the mix.

Each package of seed must include a "Certified Vendor" tag that is issued by Mn/DOT Erosion Control unit. This will indicate that the seed has come from a Mn/DOT Approved Seed Vendor as described in 3876.3.

#### **A2 Seed Cleaning**

Contractor shall use seed that has been cleaned to an extent sufficient to allow its passage through appropriate seeding equipment. Seed of introduced species must be suitable for use in conventional seeders. Seed of native species must be suitable for use in native seed drills without plugging up the boxes, drop tubes, or planting units of the seed drills. Contractor shall not use seed that has been conditioned so much that it suffers reduced viability as a result.

#### **A3 Substitutions**

Alternate species or germplasm may only be used by requesting permission from the Office of Environmental Services Turf and Erosion Control Engineering Unit. Requests for permission must include written proof from three potential suppliers that the specified germplasm is not available. Approved substitutions will be named in a memo at the time they are approved. All currently approved substitutions will be posted on the Office of Environmental Services Erosion Control Unit website. Use of germplasm not listed herein will be considered unacceptable and will be subject to 1503.

#### **A4 Requirements for seed of native species**

Contractor shall supply and plant all seed in the 300 series mixes as pure live seed (PLS). This includes the cover crop, grass, sedge, and forb components. All seed in the cover crop component of mixes in the 300 series must be certified by the Minnesota Crop Improvement Association (MCIA) or the appropriate seed certifying agency in the seed's state of origin, if other than Minnesota.



All native seed used in mixes in the 300 series shall be certified by the Minnesota Crop Improvement Association (MCIA) in the Source Identified class. The genetic origin for this seed shall be within Minnesota or eastern North Dakota, eastern South Dakota, northern Iowa, or western Wisconsin.

Source Identified seed shall be accompanied by the appropriate quality mark documentation from the MCIA, in the form of a MCIA-labeled yellow tag or certification certificate. County of genetic origin shall be clearly identified on the seed label for all native seed. Selected class and Tested class germplasm of native species listed in Table 3876-1 located on the website of the Office of Environmental Services Erosion Control unit may be used in 100 and 200 series seed mixtures.

If a specified species or germplasm is not available, substitutions will be granted for native seed in the 300 series mixes according to the following order of preference:

- 1) First preference, MCIA certified Source Identified class with a genetic origin in Minnesota or eastern North Dakota, eastern South Dakota, northern Iowa, or western Wisconsin
- 2) Second Preference: Source Identified seed certified by a seed certifying agency other than MCIA but with a genetic origin in Minnesota or eastern North Dakota, eastern South Dakota, northern Iowa, or western Wisconsin
- 3) Third Preference: Certified seed of varieties/germplasm listed in Table 3876-1.
- 4) Fourth Preference: Wild Type from Minnesota or eastern North Dakota, eastern South Dakota, northern Iowa, or western Wisconsin. Wild type seed is defined as seed of a local or regional ecotype that has originated from remnant native stands and that has not undergone any intentional selection process.

S-66.3 Mn/DOT Table 3876-1 is hereby deleted and replaced with the following:

TABLE 3876-1 NATIVE GRASSES SEED COUNTS AND ACCEPTABLE GERmplasm			
Trade Name	Scientific Name+	Acceptable Varieties/Germplasm*	Seeds Per Pound
Big Bluestem	<i>Andropogon gerardi</i>	Bonilla, Bison	131,200
Sideoats Grama	<i>Bouteloua curtipendula</i>		96,000
Blue Grama	<i>Bouteloua gracilis</i>		640,000
Fringed Brome	<i>Bromus ciliatus</i>		160,000
Kalm's Brome	<i>Bromus kalmii</i>		128,000
Hairy wood chess	<i>Bromus purgans</i>		121,600
Buffalo grass	<i>Buchloe dactyloides</i>		51,200
Blue-joint grass	<i>Calamagrostis Canadensis</i>		3,360,000
Bottle Brush Sedge	<i>Carex comosa</i>		384,000
Tussock Sedge	<i>Carex stricta</i>		848,000
Fox Sedge	<i>Carex vulpinoidea</i>		1,440,000
Canada Wild Rye	<i>Elymus canadensis</i>	Mandan	67,200
Bottle brush grass	<i>Elymus hystrix</i>		75,200
Slender Wheat Grass	<i>Elymus trachycaulus</i>	Revenue	135,000
Virginia Wild Rye	<i>Elymus virginicus</i>		62,400
Western Wheat Grass	<i>Elytrigia smithii</i>		113,600
Reed Manna Grass	<i>Glyceria grandis</i>		1,280,000
Fowl Manna Grass	<i>Glyceria striata</i>		2,560,000
Common rush	<i>Juncus effusus</i>		16,000,000
June Grass	<i>Koeleria macrantha</i>		2,400,000
Switch Grass	<i>Panicum virgatum</i>	Forestburg, Dacotah	224,000
Fowl Bluegrass	<i>Poa palustris</i>		2,080,000
Canada Bluegrass	<i>Poa compressa</i>		2,400,000
Little Bluestem	<i>Schizachyrium scoparium</i>	Itasca Germplasm	140,800
Green Bulrush	<i>Scirpus atrovirens</i>		2,240,000
Wool-grass	<i>Scirpus cyperinus</i>		2,880,000
Soft-stem Bulrush	<i>Scirpus validus</i>		496,000
Indian Grass	<i>Sorghastrum nutans</i>	Tomahawk	132,800
Prairie Cordgrass	<i>Spartina pectinata</i>	Red River Germplasm	105,600
Rough Dropseed	<i>Sporobolus asper</i>		480,000
Sand Dropseed	<i>Sporobolus cryptandrus</i>		3,200,000
Prairie Dropseed	<i>Sporobolus heterolepsis</i>		224,000
Green Needle Grass	<i>Stipa viridula</i>		120,000

\* Varieties listed are approved for use in 100 and 200 series mixes. Their substitution for MCIA Source Identified seed in 300 series mixes is only allowed upon satisfaction of the requirements of 3876.2 A5. When multiple varieties are listed for a single species, they are listed in order of preference.

S-66.4 Delete Mn/DOT 3876.2B Requirements for Native Grasses, Sedges, Rushes (label and paragraphs) and replace with:

**B Requirements for Native Grasses, Sedges, and Rushes .....Table 3876-1**  
(Keep table 3876-1)

S-66.5 Delete Mn/DOT 3876.2E Requirements for Native Forbs (Wildflowers): (label and paragraphs) and replace with:



**E Requirements for Native Forbs (Wildflowers) ..... Table 3876-4**

(Keep table 3876-4)

S-66.6 Mixtures 260 and 270 in Mn/DOT Table 3876-5 are hereby deleted and replaced with the following:

<b>Mixture: 260</b>			
<b>Common Name</b>	<b>Bulk Rate</b>		<b>% of Mix Component</b>
	<b>kg/ha</b>	<b>lb/ac</b>	
Bluegrass, Kentucky "Certified Park"	35.8	40	32.0
Bluegrass, Canada	11.2	12.5	10.0
Bluegrass, Kentucky - Low Maintenance <sup>1</sup>	33.6	37.5	30.0
Fescue, hard	9.0	10	8.0
Rye-grass, perennial	22.4	25	20.0
<b>GRAND TOTALS:</b>	<b>112</b>	<b>125</b>	<b>100.0</b>
<sup>1</sup> Any accepted low maintenance Kentucky Bluegrass Except "Park" <b><i>Purpose: Commercial Turf</i></b>			

<b>Mixture: 270</b>			
<b>Common Name</b>	<b>Bulk Rate</b>		<b>% of Mix Component</b>
	<b>kg/ac</b>	<b>lb/ac</b>	
Bluegrass, Kentucky - Elite	33.6	37.5	25.0
Bluegrass, Kentucky - Improved	33.6	37.5	25.0
Bluegrass, Kentucky - Low Maintenance	33.6	37.5	25.0
Red fescue, creeping	10.8	12	8.0
Rye-grass, perennial	22.8	25.5	17.0
<b>GRAND TOTALS:</b>	<b>134.4</b>	<b>150</b>	<b>100.0</b>
<b><i>Purpose: Residential Turf</i></b>			

S-66.7 The 300 series mixes from Mn/DOT Table 3876-5 are hereby deleted and replaced with the following:

**Table 3876-5**

<b>Mixture: 310</b>			
<b>Common Name</b>	<b>PLS Rate</b>		<b>% of Mix Component</b>
	<b>kg/ha</b>	<b>lb/ac</b>	
Bluestem, big	2.8	2.5	25.0
Indian grass	2.8	2.5	25.0
Wild-rye, Virginia	2.2	2.0	20.0
Switch grass	0.6	0.5	5.0
Blue-joint grass	0.3	0.25	2.5
Green bulrush	0.3	0.25	2.5
Wool grass	0.3	0.25	2.5
Giant bur reed	0.3	0.25	2.5
Cordgrass, prairie	1.7	1.5	15.0
<b>Grass Totals:</b>	<b>11.3</b>	<b>10.0</b>	<b>100.0</b>
<b>Common Name</b>	<b>PLS Rate</b>		<b>% of Mix Component</b>
	<b>kg/ha</b>	<b>lb/ac</b>	
Winter Wheat*	62.7	56.0	80.0
Rye-grass, annual	12.5	11.2	16.0
Wheatgrass, slender	3.1	2.8	4.0
<b>Cover Crop Totals:</b>	<b>78.3</b>	<b>70</b>	<b>100.0</b>
Wet Forbs Mixture (Table 3876-6)	2.2	2.0	100.0
<b>GRAND TOTALS:</b>	<b>91.8</b>	<b>82.0</b>	<b>100.0</b>
*Oats to be substituted for spring plantings			
Purpose: Native mix for wetter areas. Infiltration ponds, dry ponds, wet ditches. Tall height.			



Mixture: 325			
Common Name	PLS Rate		% of Mix Component
	kg/ha	lb/ac	
Bluestem, big	1.7	1.5	15.0
Fringed brome	1.7	1.5	15.0
Wheat grass, slender	1.7	1.5	15.0
Virginia wild-rye	1.7	1.5	15.0
Switch grass	0.6	0.5	5.0
Fowl bluegrass	1.7	1.5	15.0
Indian grass	1.7	1.5	15.0
Prairie cord grass	0.6	0.5	5.0
<b>Grass Totals:</b>	<b>11.4</b>	<b>10.0</b>	<b>100.0</b>
Common Name	PLS Rate		% of Mix Component
	kg/ha	lb/ac	
Blue-joint grass	0.22	0.2	10.0
Bottlebrush sedge	0.34	0.3	15.0
Tussock sedge	0.22	0.2	10.0
Fox sedge	0.22	0.2	10.0
Reed manna grass	0.22	0.2	10.0
Fowl manna grass	0.22	0.2	10.0
Green bulrush	0.22	0.2	10.0
Wool grass	0.22	0.2	10.0
Soft-stem bulrush	0.34	0.3	15.0
<b>Sedge Totals:</b>	<b>2.22</b>	<b>2.0</b>	<b>100.0</b>
Common Name	PLS Rate		% of Mix Component
	kg/ha	lb/ac	
Winter Wheat*	61.6	56	80.0
Rye-grass, annual	12.3	11.2	16.0
Wheatgrass, slender	3.1	2.8	4.0
<b>Cover Crop Totals:</b>	<b>77</b>	<b>70</b>	<b>100.0</b>
Wet Forbs Mixture (Table 3876-6)	2.2	2.0	100.0
<b>GRAND TOTALS:</b>	<b>92.8</b>	<b>84.0</b>	<b>100.0</b>
*Oats to be substituted for spring plantings			
Purpose: Native sedge/prairie meadow mix. Reaches a height of 915 mm to 1220 mm (36 to 48 inches). Developed for use on hydric soils and for wetland restoration.			

Mixture: 328			
Common Name	PLS Rate		% of Mix Component
	kg/ha	lb/ac	
Bluestem, big	2.2	2	12.5
Brome, fringed	2.2	2	12.5
Wild-rye, Virginia	4.4	4	25.0
Switchgrass	1.1	1	6.3
Bluegrass, fowl	5.5	5	31.2
Indian grass	2.2	2	12.5
<b>Grass Totals:</b>	<b>17.6</b>	<b>16.0</b>	<b>100.0</b>
Common Name	PLS Rate		% of Mix Component
	kg/ha	lb/ac	

Winter Wheat*	61.6	56.0	80.0
Rye-grass, annual	12.3	11.2	16.0
Wheatgrass, slender	3.1	2.8	4.0
<b>Cover Crop Totals:</b>	<b>77</b>	<b>70</b>	<b>100.0</b>
Common Name	PLS Rate		% of Mix Component
	kg/ha	lb/ac	
Milkweed, marsh	0.33	0.3	15.0
Prairie clover, purple	0.33	0.3	15.0
Tic-trefoil, showy	0.33	0.3	15.0
Sunflower, early	0.33	0.3	15.0
Black-eyed Susan	0.55	0.5	25.0
Vervain, blue	0.33	0.3	15.0
Economy Forbs Totals:	2.2	2.0	100.0
<b>GRAND TOTALS:</b>	<b>96.8</b>	<b>88.0</b>	<b>100.0</b>
*Oats to be substituted for spring plantings			
Purpose: Native mix for infiltration ponds, dry ponds, temporary wet ditches. Tall height.			

Mixture: 330			
Common Name	PLS Rate		% of Mix Component
	kg/ha	lb/ac	
Gramma, sideoats	3.4	3.0	21.5
Gramma, blue	2.8	2.5	18.0
Bluestem, little	3.9	3.5	25.0
June grass	1.1	1.0	7.0
Dropseed, sand	1.1	1.0	7.0
Wild-rye, Canadian	3.4	3.0	21.5
<b>Grass Totals:</b>	<b>15.7</b>	<b>14.0</b>	<b>100.0</b>
Common Name	PLS Rate		% of Mix Component
	kg/ha	lb/ac	
Winter Wheat*	62.7	56.0	80.0
Rye-grass, annual	12.5	11.2	16.0
Wheatgrass, slender	3.1	2.8	4.0
<b>Cover Crop Totals:</b>	<b>78.3</b>	<b>70</b>	<b>100.0</b>
<b>Dry Forbs Mixture (Table 3876-6)</b>	<b>0.6</b>	<b>0.5</b>	<b>100.0</b>
<b>GRAND TOTALS:</b>	<b>94.6</b>	<b>84.5</b>	<b>100.0</b>
*Oats to be substituted for spring plantings			
Application: Native mix for Sandy/dry areas. Short height.			



Mixture: 340			
Common Name	PLS Rate		% of Mix Component
	kg/ha	lb/ac	
Bluestem, big	3.3	3.0	21.5
Bluestem, little	2.8	2.5	18.0
Wild-rye, Canadian	2.2	2.0	14.0
Gramma, sideoats	2.2	2.0	14.0
Switch grass	0.6	0.5	4.0
Dropseed, sand	0.6	0.5	3.5
Bluegrass, Canada	3.4	3.0	21.5
June grass	0.6	0.5	3.5
<b>Grass Totals:</b>	<b>15.7</b>	<b>14.0</b>	<b>100.0</b>
Common Name	PLS Rate		% of Mix Component
	kg/ha	lb/ac	
Winter Wheat*	62.7	56.0	80.0
Rye-grass, annual	12.5	11.2	16.0
Wheatgrass, slender	3.1	2.8	4.0
<b>Cover Crop Totals:</b>	<b>78.3</b>	<b>70</b>	<b>100.0</b>
<b>Dry Forbs Mixture (Table 3876-6)</b>	<b>0.6</b>	<b>0.5</b>	<b>100.0</b>
<b>GRAND TOTALS:</b>	<b>94.6</b>	<b>84.5</b>	<b>100.0</b>
*Oats to be substituted for spring plantings			
Purpose: Native mix for Sandy/Dry areas. Mid-height.			

Mixture: 350			
Common Name	PLS Rate		% of Mix Component
	kg/ha	lb/ac	
Bluestem, big	3.4	3.0	21.5
Indian grass	2.8	2.5	18.0
Bluestem, little	2.8	2.5	18.0
Gramma, sideoats	3.4	3.0	21.5
Wild-rye, Canadian	2.2	2.0	14.0
Switch grass	1.1	1.0	7.0
<b>Grass Totals:</b>	<b>15.7</b>	<b>14.0</b>	<b>100.0</b>
Common Name	PLS Rate		% of Mix Component
	kg/ha	lb/ac	
Winter Wheat*	62.7	56.0	80.0
Rye-grass, annual	12.5	11.2	16.0
Wheatgrass, slender	3.1	2.8	4.0
<b>Cover Crop Totals:</b>	<b>78.3</b>	<b>70</b>	<b>100.0</b>
<b>Mesic Forbs Mixture (Table 3876-6)</b>	<b>0.6</b>	<b>0.5</b>	<b>100.0</b>
<b>GRAND TOTALS:</b>	<b>94.6</b>	<b>84.5</b>	<b>100.0</b>
*Oats to be substituted for spring plantings			
Application: Native mix for general roadside areas.			

Mn/DOT Table 3876-6 is hereby deleted and replaced with the following:



**Table 3876-6**

Mixture: Mesic Forbs		
Common Name	Botanical Name	% of Mix
Aster, smooth-blue	<i>Aster laevis</i>	5.0
Milkvetch, Canada	<i>Astragalus canadensis</i>	5.0
Prairie clover, white	<i>Dalea candidum</i>	5.0
Prairie clover, purple	<i>Dalea purpureum</i>	5.0
Tick-trefoil, Showy	<i>Desmodium canadense</i>	5.0
Coneflower, narrow-leaved	<i>Echinacea angustifolia</i>	5.0
Ox-eye, common	<i>Heliopsis helianthoides</i>	5.0
Coneflower, grey-headed	<i>Ratibida pinnata</i>	5.0
Blazingstar, rough	<i>Liatris aspera</i>	5.0
Blazingstar, tall	<i>Liatris pycnostachya</i>	5.0
Bergamot, wild	<i>Monarda fistulosa</i>	5.0
Penstemon, showy	<i>Penstemon grandiflorum</i>	5.0
Mint, mountain	<i>Pycnathemum virginianum</i>	5.0
Coneflower, columnar	<i>Ratibida columnifera</i>	5.0
Black-eyed Susan	<i>Rudbeckia hirta</i>	5.0
Goldenrod, stiff	<i>Solidago rigida</i>	5.0
Vervain, blue	<i>Verbena hastata</i>	5.0
Vervain, hoary	<i>Verbena stricta</i>	5.0
Alexanders, heart-leaved	<i>Zizia aptera</i>	5.0
Alexanders, golden	<i>Zizia aurea</i>	5.0
Total:		100.0
Rate: 0.6 kg/ha (½ pounds per acre) PLS.		

Mixture: Dry Forbs		
Common Name	Botanical Name	% of Mix
Leadplant	<i>Amorpha canescens</i>	10.0
Milkweed, butterfly	<i>Asclepias tuberosa</i>	2.0
Aster, heath	<i>Aster ericoides</i>	4.0
Tic-seed, stiff	<i>Coreopsis palmate</i>	2.0
Yarrow	<i>Achillea millefolium</i>	2.0
Long-leaved bluets	<i>Hedyotis longifolia</i>	1.0
Bushclover, round-headed	<i>Lespedeza capitata</i>	3.0
Blazingstar, rough	<i>Liatris aspera</i>	4.0
Blazingstar, dotted	<i>Liatris punctata</i>	3.0
Lupine, wild	<i>Lupinus perennis</i>	5.0
Prairie clover, white	<i>Dalea candidum</i>	5.0
Prairie clover, purple	<i>Dalea purpureum</i>	16.0
Prairie rose	<i>Rosa arkansana</i>	1.0
Black-eyed susan	<i>Rudbeckia hirta</i>	18.0
Goldenrod, gray	<i>Solidago nemoralis</i>	3.0
Goldenrod, upland	<i>Solidago ptarmicoides</i>	1.0
Goldenrod, stiff	<i>Solidago rigida</i>	2.0
Goldenrod, showy	<i>Solidago speciosa</i>	2.0
Vervain, hoary	<i>Verbena stricta</i>	14.0
Alexander's, golden	<i>Zizia aurea</i>	2.0
Total:		100.0
Rate: 0.6 kg/ha (½ pounds per acre) PLS		



Mixture: Wet Forbs		
Common Name	Botanical Name	% of Mix
Hyssop, fragrant giant	<i>Agastache foeniculum</i>	2.0
Water plantain	<i>Alisma subcordatum</i>	4.0
Meadow garlic	<i>Allium canadense</i>	1.0
Anemone, Canada	<i>Anemone Canadensis</i>	1.0
Milkweed, marsh	<i>Asclepias incarnata</i>	2.0
Aster, panicled	<i>Aster simplex</i>	3.0
Aster, New England	<i>Aster novaeangliae</i>	3.0
Aster, red-stalked	<i>Aster puniceus</i>	3.0
Aster, flat-topped	<i>Aster umbellatus</i>	1.0
Tick trefoil, Canada	<i>Desmodium glutinosum</i>	1.0
Joe-pye weed	<i>Eupatorium maculatum</i>	17.0
Boneset	<i>Eupatorium perfoliatum</i>	10.0
Goldenrod, grass-leaved	<i>Solidago graminifolia</i>	2.0
Sneezeweed	<i>Helenium autumnale</i>	1.0
Giant sunflower	<i>Helianthus giganteus</i>	2.0
Ox-eye, common	<i>Heliopsis helianthoides</i>	1.0
Great St. John's wort	<i>Hypericum pyramidalatum</i>	2.0
Iris, wild	<i>Iris versicolor</i>	1.0
Blazingstar, tall	<i>Liatris pycnostachya</i>	8.0
Bergamot, wild	<i>Monarda fistulosa</i>	1.0
Prairie clover, white	<i>Dalea candidum</i>	1.0
Prairie clover, purple	<i>Dalea purpureum</i>	2.0
Mountain mint	<i>Pycnathemum virginianum</i>	1.0
Black-eyed susan	<i>Rudbeckia hirta</i>	6.0
Goldenrod, stiff	<i>Solidago rigida</i>	2.0
Tall meadow rue	<i>Thalictrum dasycarpum</i>	2.0
Vervain, blue	<i>Verbena hastata</i>	14.0
Ironweed	<i>Veronica fasciculata</i>	1.0
Culver's root	<i>Veronicastrum virginicum</i>	3.0
Alexander's, golden	<i>Zizia aurea</i>	2.0
	<b>Total:</b>	<b>100.0</b>
Rate: 2.2 kg/ha (2 pounds/acre) PLS		

#### **S-67 (3889) TEMPORARY DITCH CHECKS**

The provisions of Mn/DOT 3889 are supplemented and/or modified with the following:

- S-67.1 Mn/DOT 3889.2B Type 2: Bioroll, is revised to read as follows:  
Type 2 ditch checks shall consist of 3897 Filter Log Type; Straw Bioroll or Wood Fiber Bioroll.
- S-67.2 Mn/DOT 3889.2C Type 3: Bioroll Blanket System, is revised to read as follows:  
Type 3 ditch checks shall consist of two components; Filter Log Type; Straw Bioroll or Wood Fiber Bioroll in accordance with 3897, staked on top of a Category 3, specification 3885 erosion control blanket. The blanket shall form a minimum width of 3.7 m (12 feet) perpendicular to the ditch gradient.

#### **S-68 (3891) STORM DRAIN INLET PROTECTION**

The provisions of Mn/DOT 3891 are supplemented and/or modified with the following:

- S-68.1 Mn/DOT 3891.3A Rock Log, is revised to read as follows:

- Rock logs shall meet the requirements of 3897.2 Filter Log Type Rock Log.
- S-68.2 Mn/DOT 3891.3B Compost Log, is revised to read as follows:  
Compost logs shall meet the requirements of 3897.2 Filter Log Type Compost Log

**S-69 FINAL ESTIMATE AND FINAL PAYMENT**

The following provisions shall apply to preparation of the Final Estimate and execution of Final Payment under this Contract:

**S-69.1 Final Estimate**

State Law provides that the final estimate will be made within 90 days after completion of all work required under this Contract. If, however, the total value of the Contract exceeds \$2,000,000.00, the 90 day requirement will not apply and the time allowed for making such final estimate shall be 180 days after the work under this Contract has been, in all things, completed to the satisfaction of the Commissioner.

**S-69.2 Final Payment**

If this Contract contains a "Disadvantage Business Enterprise or Targeted Group Business" goal, the following requirement shall apply:

"Before final payment is made, the Contractor shall also complete an affidavit showing the total dollar amounts of work performed by disadvantaged business enterprise (DBE) and targeted group business (TGB)."

